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¹The letter (a) following entry numbers indicates citation of abstracts which are primary publications; these are usually of theses or of papers read at professional meetings.

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EDITORIAL NOTE

The subdivisions used in the May issue in the classes "General" and "Functional Disorders" are repeated in this issue and, in addition, a tentative breakdown of the class "General Social Processes" is introduced. These represent exploratory attempts to improve the arrangement of abstracts, as preliminary steps in revising the classification scheme. Similar trials will be made in remaining issues of the present volume, and from our experience and the comments of readers, we hope to be able to develop a new system for introduction in the next volume.

* * *

The editors will appreciate receiving reprints or author-prepared abstracts of articles by psychologists which appear in journals outside the psychological and cognate fields, e.g. state or local scientific society proceedings, trade journals, technical journals in the humanities, etc. If authors will prepare abstracts of their articles of psychological significance published in this manner, it will be a valuable contribution. If an author is not sure whether or not a particular journal is covered regularly, an abstract or reprint may be sent for use if necessary.

* * *

Several inquiries have been made concerning the abstracts which have been appearing since the October, 1946 issue, credited to the *Bibliography of Scientific and Industrial Reports, U. S. Department of Commerce*. In this weekly publication the Office of Technical Services of the Department of Commerce abstracts reports, usually in manuscript form, of research done during the War in the United States and similar reports of foreign nations. The Office of Technical Services will supply microfilm or photostat copies of these reports for the prices shown. The abstracts we publish are taken, with some editing, from the *Bibliography*. Our bibliographic entries include all available information concerning series numbers in order to facilitate location in libraries, as well as the Publication Board Number to be used in ordering.

* * *

Attention is called to entry number 1729 for Volume 1, Number 1, of the *Canadian Journal of Psychology*. This quarterly journal is the official publication of the Canadian Psychological Association and replaces that Association's *Bulletin* which has been published for the past six years.

* * *

A list of periodicals currently received is published on pages 237 to 240 of this issue.

GENERAL

1707. Ashby, W. R. The nervous system as physical machine: with special reference to the origin of adaptive behaviour. *Mind*, 1947, 56, 44-59.—An attempt is made to solve the problem of how a physical system can show adaptive behaviour. A special mathematical technique for the exact description of the properties of a machine is constructed, and a number of new theorems on equilibrium and organization in generalized dynamic systems are stated. Of special importance in the theory are the events which occur when a machine breaks, i.e., changes its organization and its equilibria. If one includes the break-events in the equations of a complete system one can account for the possibility of adaptive behaviour.—F. Heider.

1708. Bawden, H. Heath. (Escondido, Calif.) The psychical as a biological directive. *Phil. Sci.*, 1947, 14, 56-67.—The difference between the psychical and the physical is comparable to that between the potential and the kinetic energy of the physicist. There is nothing occult in the use of symbols, but merely a preparatory dealing with a situation by means of our minor muscles. Purpose is merely the incipient phase of the final overt act. Thus it is possible to describe the situation in which a human being finds himself without using the terms consciousness, attention, volition, etc., although this traditional language may be employed in much the same way as we continue to speak of sunsets. There should, however, be a reconstruction of the inorganic sciences so as to make room for the new factors which are being brought to our attention in electronics and intra-atomic physics as well as in biology, psychology, and sociology.—R. H. Dotterer.

1709. Cassirer, E. L'influence du langage sur le développement de la pensée dans les sciences de la nature. (The influence of language on the development of thought in the natural sciences.) *J. Psychol. norm. path.*, 1946, 39, 129-152.—The verbal forms which serve us in the description of the everyday world about us and which actually influence our interpretation of it are no longer adequate when the problem becomes that of analyzing it physically. The science of Aristotle was shackled to his language categories; it remained a science of words—mere dialectic. Galileo did much to emancipate science from language by replacing certain qualitative concepts with mathematically symbolized quantitative concepts. But until the formulation of the theory of relativity the physicist has found himself caught between his intuitive awareness of the "sensible" world and his thoughtful probing of its physical elements. He has created and multiplied

language concepts which have bound him to "substantiality" and which have involved him in apparently irreconcilable contradictions. With the development of the quantum theory there has come about an awareness of the need for flexibility in the symbolic systems used to spell out natural phenomena. In this respect mathematics has an advantage over language being untrammelled by sensory connotations.—*M. Sheehan.*

1710. Edgerton, Harold A., (Ohio State U., Columbus, O.) Britt, Steuart Henderson, & Davis, Helen M. Is your state discovering its science talent? *Sci. Educ.*, 1944, 28, 228-231.—The question is answered by statistical evidence, illustrated by a chart and a map of the states of the Union ranked by the average number of contestants per thousand high school seniors in the first three talent searches, showing each state above and below expectancy based on high school senior population.—*G. E. Bird.*

1711. Fraisse, Paul. Les orientations actuelles de la psychologie française. (Present trends in French psychology.) *Egypt. J. Psychol.*, 1946, 2, 39-45.—Due to the war, original research and experimentation has been impossible for most French psychologists, but these same conditions have led to reflection, synthesis, and theoretical development which more than make up in quality for the defect in quantity. The recent publications of Tilquin, Guillaume, Piéron, Wallon, Delay, Stoetzel, and Bonnardel are reviewed.—*G. S. Speer.*

1712. Smith, H. Bompas. (U. Manchester, England.) The psychology of togetherness. *Bull. John Rylands Libr., Manchr.*, 1946, 29, 359-368.—The tendency of viewing the world of things and persons including oneself as not a whole, as not a togetherness, is deplored by the author. Extreme specialization and compartmentalization tend to cut off one's vision of the whole. Special reference is made to many psychologists who either like mechanists shut out of the picture the subjective psychic yearnings of the individual or like romantic subjectivists exclude from the reckoning the external world of things and other people. The wholesome viewpoint advocated by the author values the world as a grand subject-object whole, exhibiting both interdependencies and independencies of its constituent parts. This value-togetherness is exemplified in that feeling towards tools and instruments and machines which enable us to achieve our purposes. This togetherness-perception is seen as conducive to a higher level of moral action.—*F. C. Sumner.*

1713. Stimson, Dorothy. (Goucher Coll., Baltimore, Md.) A case report on a history of scientific ideas. *Sci. Mon.*, N. Y., 1947, 64, 148-154.—A course in the history of the scientific point of view is offered as an elective in the history department to juniors and seniors at Goucher College in all major fields. A questionnaire was submitted to the 445 young women who have satisfactorily completed the course since its inception 25 years ago. It is urged

that "the historical approach to science richly rewards its students, whether they are laboratory workers or not" and that today it is more necessary than ever to have "a general public trained to appreciate scientific methods and the scientific approach to truth."—*E. Girden.*

1714. Tiffin, Joseph, Knight, Frederic B., & Asher, Eston Jackson. (Purdue U., Lafayette, Ind.) The psychology of normal people. (Rev. ed.) Boston: Heath, 1946. Pp. xvi + 581. \$3.50.—In revising this elementary text, the authors have continued to emphasize applied studies of especial interest to students preparing for business, industry, or the professions. New material includes research published during the past 5 years in the fields of aptitude measurement, personality tests, emotion, and thinking. Chapter topics are: what is psychology; differences between people; differences in environment; personality and adjustment; personality measurement; intelligence; abilities, aptitudes, and interests; our feelings and emotions; attention; learning; memory; perception; imagination; reasoning; speaking, reading, and writing. At the end of each chapter are listed questions on the chapter, questions for discussion, suggested readings, and more advanced readings. (See also 14: 3884.)—*W. K. Estes.*

1715. Vergani, Ottavio. (Psychiatric Hospital Mombello, Italy.) Psicologie e psicologi. (Psychologies and psychologists.) *Arch. Psicol. Neurol. Psichiat.*, 1946, 7, 195-201.—Psychology has a unique position among sciences. Its object is such that psychology is bound to be in close contact with trends of thought not strictly scientific. The psychologist should have a more general outlook on life and human relations than other scientists do; ethical values cannot be disregarded in the psychologist's personality. While contacts with biological sciences and psychiatry are useful and necessary, psychology should have its own research methods. In a school of higher education the psychologist is the best qualified member to take up a role connected with general education and development of the individual personality.—*R. Calabresi.*

1716. Williams Roger J. (U. Texas, Austin, Tex.) Humanics: a crucial need. *Sci. Mon.*, N. Y., 1947, 64, 174-180.—The investigation by specialists has inevitably resulted in the piecemeal study of man. What is required is the development of the applied science of humanics which will cut across all boundaries and devote itself to all aspects of man's existence that appear important in his social relations. Its primary aim must be "gaining scientific understanding of human beings that will be useful in solving social problems." In spite of some attempts initiated in the recent past, the need for such a broad approach is more crucial than ever. Treating of social problems in a statistical manner is insufficient, and the emphasis will have to be directed to the concern of the individual.—*E. Girden.*

METHODS AND APPARATUS

1717. Baumgarten-Tramer, Franziska. (Solothurn, Switzerland.) *Der Rorschach-Test im Lichte der experimentellen Psychologie.* (The Rorschach test from the viewpoint of experimental psychology.) *Arch. Psicol. Neurol. Psychiat.*, 1946, 7, 135-171.—The unique place of the Rorschach test in psychiatric diagnosis is considered by the author an example of the discrepancy between methods and approach in psychology and psychiatry. The first part of the article contains the history of the Rorschach method and the early criticism on the part of psychologists such as W. Stern and A. Romer. The Rorschach test is discussed from the point of view of psychology of perception and in its methodological value, in relation to the development of other experimental techniques. Some of the author's criticism is concerned with the one-sided statistical interpretation of the experiments, as they were conducted by Rorschach himself, the application of the test to children, the confusion arising from the symbolic meaning of responses, and the difficulty to differentiate what is objective and what is subjective in the interpretation of data. While the development of tests in experimental psychology has been toward increased attention to the formal aspect of the individual response, the Rorschach test seems to represent an opposite trend. It is felt that the contempt of psychiatrists toward the contribution of experimental and applied psychology and the fashion of psychology of personality greatly contributed to the unusual acceptance of the Rorschach test on the part of psychiatrists. A better understanding and collaboration between psychiatrists and psychologists would be advantageous to both fields.—R. Calabresi.

1718. Collens, William S., Zilinsky, James D., & Boas, Louis C. Clinical vibrometer; an apparatus to measure vibratory sense quantitatively. *Amer. J. Med.*, 1946, 1, 636-637.—An apparatus is described for the quantitative measurement of vibration sense.—F. C. Sumner.

1719. King, C. Daly. Psychology and the scientific fallacy. *Yale J. Biol. Med.*, 1946, 18, 541-550.—The demonstration of the nonoccurrence of a consequence deduced from an hypothesis and the conclusion, then, that the hypothesis was incorrect is regarded as a valid negative justification of the scientific method. However, the Fallacy of Affirming the Consequent is believed to be involved when it is concluded that an hypothesis is a correct formulation of reality because the occurrence of consequences deduced from it has been demonstrated. Supposed safeguards discussed are regarded as invalid for reasons of being inconclusive. It is suggested that the Fallacy may be avoided by rigorously checking the premises and the inductive process resulting in the hypothesis itself. Since the premises are simply past experiences, the correctness of the hypothesis will (assuming that the inductive process itself is correct, which may be logically checked) depend upon the correctness of the percep-

tions involved. A perception experienced by a really normal person ("normal is here defined as that which functions in accordance with its inherent design") must be, for the human race, a correct perception. It is regarded as the task and duty of psychology to determine these human norms of perception.—A. C. Hoffman.

1720. Kinsler, David. Notes on the errors in measurements of time intervals with an Aberdeen chronograph. (Aberdeen Proving Ground Rep. AS-8, 1941; Publ. Bd. No. 49730.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 11. \$1.00, microfilm; \$1.00, photostat.—When the beginning and ending of a time interval is marked on the drum of an Aberdeen chronograph, that length can be reduced to time-in-seconds if the circumferential velocity of the drum over the interval is known. Notes on the determination of the circumferential velocity of the Aberdeen chronograph are given. Limitations of data obtained with it are discussed, and suggestions for improvement are given, which include impression of time signals directly on the drum, use of a continuously-reading and high-speed recording frequency meter, and operating the synchronous motors with a standard frequency. Notes on reduction formulas for, and errors caused by, straying sparks in measurements of time intervals with an Aberdeen chronograph are given. A chart shows frequency of alternating current in cycles per second for 150 seconds measured with Leeds and Northrup-Micromax frequency meter, and cyclical action of the meter is illustrated, showing a frequency reading lagged by 1.25 seconds once each 2.4 seconds.—(Courtesy of *Bibl. scient. indust. Rep.*, U. S. Dep. Commerce).

STATISTICS

1721. Hoel, Paul G. Introduction to mathematical statistics. New York: J. Wiley; London: Chapman & Hall, 1947. Pp. x + 258. \$3.50.—"The topics in the first seven chapters of this book are largely concerned with the theory of certain classical large-sample methods in statistical theory. They have been arranged according to the number of variables being studied. First, problems dealing with one variable are considered, then problems dealing with the relationship between two variables, and finally problems dealing with more than two variables. In each problem the descriptive methods of treating data are considered first, after which the theoretical counterpart, or mathematical model, is considered. . . . The topics in the last five chapters are largely concerned with the theory of certain modern methods in statistics, including in particular some of the important small-sample methods."—N. R. Bartlett.

1722. Kendall, D. G. Fisher's "Problem of the Nile." *Nature, Lond.*, 1946, 158, 452.—The problem is discussed of estimating the number of parameters of the parent population from information in a sample of n independent observations from that population. The author suggests "that further

progress in this field is most likely to be made by attempting to generalize Fisher's solution in a way which does not preserve one of its characteristic features—the determination of the configurations of sub-samples by the configuration of their parent.”—*A. C. Hoffman*.

1723. Kesteven, G. L. The coefficient of variation. *Nature, Lond.*, 1946, 158, 520-521.—“In view of certain erroneous statements which have been made as to the nature and meaning of [the coefficient of variation], and of certain fallacious inferences drawn from its use, it is thought desirable to offer the following comments . . .” (1) No correction is made for the effect of true or spurious correlation effects, nor for the correlation generally existing between the mean and the standard deviation. (2) Since only sample standard deviation values are used, a comparison of the CV's of two groups is likely to be erroneous unless the conditions of sampling and the particular measurements referred to are identical. (3) From a compilation of means, standard deviations, and CV's, it is concluded that the characteristic value of the CV for any measurement in any group cannot be predicted nor can any general limits to the value of the CV be set. (4) Since the contribution of many factors to the size of the variance cannot be predicted, “it is impossible to argue to the sample from the value of the CV. . . . However, despite these limitations to the CV it is desirable to have some measure of relative variability, and it is thought that with some modification, and with care in the specifications of the conditions of use, the CV can serve this purpose.”—*A. C. Hoffman*.

1724. Lindley, D. V. Linear ‘curves of best fit’ and regression lines. *Nature, Lond.*, 1946, 158, 272-273.—The author comments on an article by Austen and Pelzer (see 20: 3965), in which the problem was discussed of fitting a straight line to a scatter diagram when both variables are subject to error. It is held in the present article that using the line of best fit to predict one variable from knowledge of the other will, in general, lead to biased results, since the suggested method of estimating the slope of the best fitting line (ratio of the standard deviations of the variables involved) is inconsistent; i.e., as the sample increases indefinitely, this estimate, instead of tending to the true slope, tends toward another value. Reference is made to another method of estimating the slope. Comments on this article appear on p. 521 of the same volume.—*A. C. Hoffman*.

1725. Moran, P. A. Random associations on a lattice. *Nature, Lond.*, 1946, 158, 521.—Formulas for determining the probability distributions and variance are given for a correlation table of $m \times n$ points.—*A. C. Hoffman*.

1726. Muhsam, H. V. Representation of relative variability on a semi-logarithmic grid. *Nature, Lond.*, 1946, 158, 453.—For purposes of graphically comparing the dispersion of several distributions of data which vary over too wide a range for ordinary

graph paper, the author suggests plotting the distributions on the system of rectangular co-ordinates in which the abscissa is divided logarithmically and the ordinate arithmetically. Further comment on this method appears on p. 662 of the same volume.—*A. C. Hoffman*.

1727. Stevens, W. L. The logarithmic transformation. *Nature, Lond.*, 1946, 158, 622.—If natural logarithms are used in the logarithmic transmutation of the measures of a variable and dispersion is not too large, the coefficient of variation is given directly by the standard deviation of the transmuted values. If common logarithms are used, the standard deviation must be multiplied by 2.30259 to give the coefficient of variation for the variable.—*A. C. Hoffman*.

REFERENCE WORKS

1728. [Beers, Alma Holland, Comp.] Publications in the field of science from the University of North Carolina (1934-1944). *J. Elisha Mitchell sci. Soc.*, 1945, 61, 301-375 (also in Coker, W. C., *Studies in science*. Chapel Hill: University of North Carolina Press, 1946).—This bibliography is a continuation of an earlier work of the above compiler published in the same journal in 1934. Some research done by the University faculty cannot be included because it was done in connection with the war effort and has not been released for publication. Pages 355-360 of the bibliography are devoted to publications of the Department of Psychology.—*J. J. Kane*.

1729. Long, John A., & Hobday, Kathleen M. [Eds.] *Canadian journal of psychology*. Toronto: University of Toronto Press. Vol. 1, No. 1, March, 1947. Quarterly. \$3.00 per annum.—This journal of the Canadian Psychological Association replaces that Association's *Bulletin*.

HISTORY AND BIOGRAPHY

1730. Bartlett, F. C. Dr. Charles S. Myers, C.B.E., F.R.S., *Nature, Lond.*, 1946, 158, 657-658.—Dr. Myers' career is described with particular mention of his part in the founding of the Cambridge Laboratory of Experimental Psychology, the National Institute of Industrial Psychology, and the British Psychological Society.—*A. C. Hoffman*.

1731. Bray, Charles W. Final report and bibliography of the Applied Psychology Panel, NDRC. (OSRD Rep. No. 6668; NDRC Appl. Psychol. Panel Rep. No. 740, 1946; Publ. Bd. No. 50833.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 72. \$2.00, microfilm; \$5.00, photostat.—The Applied Psychology Panel began its work on June 20, 1942, as the Committee on Service Personnel—Selection and Training of the National Research Council. On Oct. 7, 1943, the Panel was formed to continue the work of the Committee, and the latter was dissolved. The work of the two groups represented a single, co-ordinated approach to the human being considered as an instrumentality of war.

Hence the Panel and Committee studied selection, classification, and training of service personnel and human needs and capacities in relation to the design and operation of military equipment. The work of the Panel and Committee is described in their reports, which are listed in the bibliography.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

1732. Fiske, Donald W. Naval aviation psychology. IV. The central research groups. *Amer. Psychologist*, 1947, 2, 67-72.—The development of the naval aviation psychology program is traced from the establishment of the Aviation Psychology Section at the Pensacola Naval Air Station. (See also 20: 887, 2044; 21: 854.)—N. R. Bartlett.

1733. F[ontes], V. João Henrique Pestalozzi. (Johann Heinrich Pestalozzi.) *Criança portug.*, 1945-46, 1-2, 9-18.—Biographical sketch and appreciation of Pestalozzi on the centenary of his birth. Portrait.—R. J. Corsini.

1734. Klausner, Neal W. (*Grinnell Coll., Grinnell, Ia.*) Three decades of the epistemological dialectic, 1900-1930. *Phil. Sci.*, 1947, 14, 20-43.—At the close of the last century idealism was dominant in America and England. In the first decade of the present century, however, a realistic reaction set in. "New" realists and "critical" realists attacked the epistemological and ontological positions of the various idealistic schools and also carried on a vigorous polemic inter se. The pragmatists agreed with the realistic schools in rejecting the doctrine of the Absolute. On the other hand, many thinkers, including some of the realists and pragmatists, complained that there had been entirely too much emphasis upon epistemology. Besides, it was found very difficult to give a specific meaning to pragmatism. As the controversies proceeded, this became increasingly true of realism and idealism also. "Perhaps the most serious weakness in these years was the failure to see that it is the whole man who is the knower. . . . New steps in the epistemological dialectic . . . must avoid making an abstraction of the knower."—R. H. Dotterer.

1735. Mossner, Ernest C. The Continental reception of Hume's *Treatise*, 1739-1741. *Mind*, 1947, 56, 31-43.—A survey of reviews in contemporary French and German learned journals reveals that Hume's *Treatise* did not pass unnoticed on the Continent. The reviews were mostly disparaging. It can be assumed that Hume was aware of them.—F. Heider.

1736. Wittels, Fritz. The contribution of Benjamin Rush to psychiatry. *Bull. Hist. Med.*, 1946, 20, 157-166.—On the 200th anniversary of Benjamin Rush an evaluative review of his contributions to psychiatry is made. Attention is called among other things to his unshakeable faith and enthusiasm in the curableness of all mental illness; his stress on listening seriously to the patient's opinion of his case; his unusually distinct nosography despite the complete abandonment today of his nomenclature;

his drawing of psychiatric examples from fictional literature; his resort to tricks in the therapy of his patients; his emphasis upon occupational therapy; his enumeration of the phobias and manias; his textbook *Medical Inquiries and Observations upon Diseases of the Mind* (1812), hardly read today yet containing many valuable psychiatric insights; and reforms advocated by him but never carried out such as abolition of capital punishment and a separate hospital for alcoholics.—F. C. Sumner.

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

1737. Anastasi, Anne. The place of experimental psychology in the undergraduate curriculum. *Amer. Psychologist*, 1947, 2, 57-62.—Two approaches to the question have been utilized. First, catalogues for 75 colleges were studied to assess the proportion of colleges offering experimental psychology and to determine the relative number requiring the course of all psychology majors. Second, 47 replies from 56 prominent psychologists canvassed by questionnaire were classified and tabulated to yield another measure of the number of semesters of the experimental course required of majors, to weigh the opinions of the value of the course for students preparing for applied fields, and to gain an appreciation of the most favored content.—N. R. Bartlett.

1738. Chase, Wilton P. (*Veterans Admin., Washington.*) Professional frustration in government psychologists. *Amer. Psychologist*, 1947, 2, 73-75.—Reasons for dissatisfaction are discussed. Much of the discontent is attributed to the fact that psychologists ordinarily serve in the role of technical experts, with important policy decisions pertaining to their work being made by administrators who are not qualified to exercise judgment on professional psychological matters.—N. R. Bartlett.

1739. England, Arthur O. (*Ohio State U., Columbus, O.*), & Laurent, Harry, Jr. A comparison of ASTP psychology graduates with other groups in the AAF Classification School. *Amer. Psychologist*, 1947, 2, 63-66.—Data on training grades, experience, age, and aptitude scores for an ASTP group are compared with those for two other groups simultaneously undergoing training in a 21-day course in Classification School. The quality of the work of the ASTP graduates in their subsequent assignments to duty is evaluated.—N. R. Bartlett.

1740. Hutt, Max L. (*Columbia U., New York*), & Milton, Emmette O. An analysis of duties performed by clinical psychologists in the Army. *Amer. Psychologist*, 1947, 2, 52-56.—A questionnaire covering " . . . analysis of job functions; experience with psychological tests, validation studies, therapeutic experience, and research programs" was completed by 50 commissioned Army clinical psychologists on active duty in general and convalescent hospitals and hospital centers. Data are summarized and discussed.—N. R. Bartlett.

[See also abstracts 1781, 1785, 1792, 1830, 1875, 1885, 1907, 2005, 2033.]

NERVOUS SYSTEM

1741. Babsky, Eugene B., & Minajev, P. F. Changes in the activity of cholinesterase of nervous tissue under the influence of constant current. *Nature, Lond.*, 1946, 158, 343-344.—By means of biological assay of the dorsal muscle of the leech and the m. rectus abdominis of the frog, it was found that "... in 90 per cent of the experiments the activity of cholinesterase was definitely affected by polarization. . . . This influence of polarization upon the activity of cholinesterase was equally manifested in the cerebral cortex and in the nerve fibres. . . . The fact that the cathode of constant current lowers the activity of cholinesterase, while the anode produces the opposite effect, that is, increases the activity of this enzyme, may be explained on the basis of the changes that take place in the distribution of ions in the nerve under the influence of polarization."—A. C. Hoffman.
1742. Bernhard, Carl Gustaf, & Skoglund, Carl Rudolf. On the blocking time of the cortical alpha rhythm in children. *Acta psychiat., Kbh.*, 1943, 18, 159-170.—The blocking of the alpha rhythm by light stimulation was studied in children of various ages. "Blocking time," i.e., the latent time between onset of the light stimulus and cessation of the alpha rhythm, varies inversely with age and directly with duration of the alpha wave. If peripheral latent time before the onset of the retinal action potential is subtracted from total "blocking time," the post-retinal latent time is found to be about equal to the duration of the alpha wave in various subjects.—A. L. Benton.
1743. Berry, Charles M., & Hinsey, Joseph C. (Cornell U., Medical Coll., New York.) The recovery of diameter and impulse conduction in regenerating nerve fibers. *Ann. N. Y. Acad. Sci.*, 1946, 47, 559-574.—This study was concerned with the measurement of the contours of the action potentials, the conduction velocities of the impulses, and fiber diameters in a series of cat nerves, as observed oscillographically and related to histological controls. The excised, distal stumps of tibial, peroneal, and saphenous nerves were studied at intervals up to 1,363 days after transection and suture. The recovery of properties might be considered a process of reconstitution or maturation.—S. Ross.
1744. Bodansky, Oscar. (Edgewood Arsenal, Maryland.) Cholinesterase. *Ann. N. Y. Acad. Sci.*, 1946, 47, 521-547.—The author examines the extent to which the data available on the properties of cholinesterase play a part in nerve functioning. 70-item bibliography.—S. Ross.
1745. Brink, Frank, Jr., Bronk, Detlev W., & Larrabee, Martin G. (U. Pennsylvania, Philadelphia, Pa.) Chemical excitation of nerve. *Ann. N. Y. Acad. Sci.*, 1946, 47, 457-485.—This report is concerned with changes in the functional characteristics of a nerve caused by alterations in its chemical environment. The effects of such agents as calcium, potassium, and acetylcholine are studied. 34 references.—S. Ross.
1746. Chauchard, P. (*École pratique des Hautes Études, Sorbonne, Paris.*) La régulation centrale des fonctions nerveuses et le problème du sommeil. (Central control of nervous functions and the problem of sleep.) *J. Psychol. norm. path.*, 1946, 39, 204-219.—After a review of the chronaxie theory and the experimental work on identification of the role of the cerebellar Purkinje cells and the red nucleus of the midbrain in effecting the isochronism between peripheral and cortical cells which determines the routing of nerve impulses, the writer goes on to a consideration of the effect of this regulating center upon cortical activity. Suppression of the "subordinating" influence of the center allows the peripheral neurons to return to their "constitutional" chronaxie and results in an increase in cortical chronaxie as well—the inference being that this higher level represents the constitutional chronaxie of the cortical cells. When the level becomes too high, the cortex no longer gives evidence of excitation, and, simultaneously, the cerebellar regulating center ceases to function. With variations this is the state of affairs in hemiplegia, anesthesia, hypnosis, insulin shock, and sleep. The last may be the effect of shutting out afferent impulses to the cortex which in turn suppresses the cerebellar center, or may be at other times the result of a protective reflex controlled by a center anterior to the red nucleus responding to the toxins of fatigue.—M. R. Sheehan.
1747. Cox, R. T., Coates, C. W., & Brown, M. Vertner. (Johns Hopkins U., Baltimore, Md.) Electrical characteristics of electric tissue. *Ann. N. Y. Acad. Sci.*, 1946, 47, 487-500.—A description is presented of the group of electric fishes. These are alike in having a common unit of structure, the *electroplax*. The arrangement and electrical characteristics of this tissue are reported.—S. Ross.
1748. Davidoff, Leo M., & Dyke, Cornelius, G. (Columbia U., New York.) The normal encephalogram. (2nd, rev. ed.) Philadelphia: Lea & Febiger, 1946. Pp. 232. \$5.50.—The second edition of this fundamental thesis on air encephalography is based on the authors' experiences with over 8,000 encephalograms. Chapter 1 gives the technique in detail as well as studies on rates of filling and absorption. The ventricles and cisterns each receive a chapter, as do the cerebral convolutions and sulci, many of which are shown to be characteristic in appearance and readily identified. A final chapter deals with the intracranial structures, including not only the basal ganglia but also such structures as the chiasma, infundibulum, mamillary bodies, colliculi, pineal body, and cerebral peduncles. The 155 figures are mostly encephalograms, each being labelled to show critical points. 266-item bibliography. (See also 18: 1300.)—C. E. Henry.
1749. Eccles, J. C. (U. Otago, Dunedin, New Zealand.) An electrical hypothesis of synaptic and neuro-muscular transmission. *Ann. N. Y. Acad. Sci.*, 1946, 47, 429-455.—This report is restricted to

the synapses of ganglia and the spinal cord and to the neuro-muscular functions of skeletal muscle. The problem may be subdivided into two aspects: (1) the mechanism whereby impulses in presynaptic nerve fibers set up catelectrotonic synaptic potentials in the postsynaptic cell, and (2) the initiation of impulses in the postsynaptic cell by these synaptic potentials. The writer discusses the recent experimental evidence in support of an electrical hypothesis. This hypothesis is developed, applied, and analyzed. 79-item bibliography.—S. Ross.

1750. Fessard, Alfred. (*Institut Marey, Paris, France.*) Some basic aspects of the activity of electric plates. *Ann. N. Y. Acad. Sci.*, 1946, 47, 501-514.—The elementary electrical process in the discharge of electric plates is, according to the writer, comparable to a nerve action potential. Recent investigation into the biochemistry of the electric organ proved their metabolism to be quite similar to that of nerve tissue or striated muscle. The physiological significance of the electric plate and the origin and localization of the electromotive force are discussed. 34 references.—S. Ross.

1751. Gerard, R. W. (*U. Chicago, Chicago, Ill.*) Nerve metabolism and function; a critique of the role of acetylcholine. *Ann. N. Y. Acad. Sci.*, 1946, 47, 575-600.—The general background of the role of acetylcholine is discussed in terms of metabolism and of neural metabolism. The "nerve machine" is treated in terms of depolarization, active membrane participation, the discontinuous response, local currents, immediate recovery, and full restoration. A section deals with the linkage of action to metabolism. The role of the acetylcholine system is analyzed, followed by a shorter treatment of junctional transmission. The author concludes "that ACh may extend further and have more importance in cell functioning than has yet been seriously considered and that any particular role it plays in transmission is a secondary and derivative one." 105-item bibliography.—S. Ross.

1752. Gilman, Alfred. (*Edgewood Arsenal, Maryland.*) The effects of drugs on nerve activity. *Ann. N. Y. Acad. Sci.*, 1946, 47, 549-558.—"There is no phase of nerve activity which cannot be profoundly affected by drugs." The effects of the sodium salt of fluoracetic acid and diisopropylfluorophosphate are particularly emphasized in the discussion.—S. Ross.

1753. Harrington, David O. The autonomic nervous system in ocular diseases. *Amer. J. Ophthalm.*, 1946, 29, 1405-1425.—The relationships between the eye and the autonomic nervous system are reviewed; case histories illustrate the ocular manifestations of autonomic nervous system dysfunction: central angiospastic retinopathy; ocular changes in Raynaud's disease; amaurosis fugax; migraine; commotio retinae. The importance of psychic trauma in initiation of autonomic imbalance in susceptible individuals is noted. 30 references.—D. J. Shaad.

1754. Höber, Rudolf. (*U. Pennsylvania, Philadelphia, Pa.*) The membrane theory. *Ann. N. Y. Acad. Sci.*, 1946, 47, 381-394.—A discussion is presented of the physico-chemical mechanisms of nerve activity. Some aspects of muscle potentials are also treated. The writer discusses (1) the ion permeability of the resting muscle and nerve, (2) the change of ion permeability by direct current, and (3) the reversal of normal action potential. 28-item bibliography.—S. Ross.

1755. Hodgkin, A. L., & Huxley, A. F. Potassium leakage from an active nerve fibre. *Nature, Lond.*, 1946, 158, 376-377.—"According to the membrane theory of nervous action, a minute quantity of potassium ions should leak out of a nerve fibre each time that an impulse travels along it." Studies of the membrane conductance of stimulated axons immersed in oil indicate "that activity is associated with the leakage of a substance the effect of which on the nerve membrane is very like that of potassium . . . during the period of recovery, potassium appeared to be re-absorbed."—A. C. Hoffman.

1756. Hodgkin, A. L., & Rushton, W. A. H. The electrical constants of a crustacean nerve fibre. *Proc. roy. Soc.*, 1946, B133, 444-479.—Theoretical equations are derived to describe the characteristics of the local excitatory process when a subthreshold stimulus is suddenly applied. Observations on a nerve taken from the walking legs of lobsters showed that (1) the rise and fall of the extrapolar potential at different distances from the point of stimulation conformed to the theoretically derived curves, (2) the steady extrapolar potential declined exponentially with distance, (3) the voltage gradient midway between two distant electrodes was uniform, and (4) the potential recorded was in fact from the membrane. Values (constants) were determined for the electrical resistance of the fluid outside the nerve fiber, the resistance of the axoplasm, the capacity, and the resistance of the surface membrane. The local response was also studied as the strength of the subthreshold stimulus was increased. Matters relating to theories of the nerve impulse are discussed.—A. C. Hoffman.

1757. Katz, Bernhard, & Kuffler, Stephen W. Excitation of the nerve-muscle system in Crustacea. *Proc. roy. Soc.*, 1946, B133, 374-389.—Muscle-potential phenomena in Crustacea (crabs and crayfish) are described and compared to similar observations in higher animals.—A. C. Hoffman.

1758. Kaufman, I. Charles, & Hoagland, H. Dominant brain wave frequencies as measures of physico-chemical processes in cerebral cortex. *Arch. Neurol. Psychiat.*, Chicago, 1946, 56, 207-215.—"Use of the dominant alpha frequency as a measure of chemical kinetics of cerebral processes is discussed. Advantages of the method of Brazier and Finesinger for plotting electroencephalographic frequency spectrums are considered and compared with those of the method of Engel and associates. It is concluded that the Engel method does not furnish a concept of frequency that lends itself to

analysis of the chemical kinetics of cerebral processes."—K. S. Wagoner.

1759. Nachmansohn, David. (Coll. Physicians & Surgeons, New York.) Chemical mechanism of nerve activity. *Ann. N. Y. Acad. Sci.*, 1946, 47, 395-428.—A survey is presented of the essential facts established in regard to the chemical mechanism in nerve functioning. "These facts considered altogether make it highly probable that the release and removal of ACh [acetylcholine] is an intracellular event, directly associated with the nerve action potential." 42-item bibliography.—S. Ross.

1760. Putnam, Tracy J. (Columbia U., New York.) Introduction to the conference on nerve activity. *Ann. N. Y. Acad. Sci.*, 1946, 47, 377-379.—The purpose of this symposium is not only to present recent data, but to discuss some of the fundamental aspects and problems regarding the physico-chemical mechanism of nerve activity.—S. Ross.

1761. Van Harreveld, A. (California Institute of Technology, Pasadena, Calif.) Re-innervation of denervated muscle fibers by adjacent functioning motor units. *Amer. J. Physiol.*, 1945, 144, 477-493.—Following the unilateral destruction of part of the nerve fibers innervating the sartorius and quadriceps muscles of the rabbit, it was found that the forces developed during stimulation of the remaining fibers were significantly greater than those for the normal muscles of the opposite side. A small increase was first noted about two weeks after operation and continued to become greater for at least 6 months. This increase is attributed primarily to an increased branching of the endings of the intact motor nerve fibers so that they establish connections with the denervated muscle fibers and secondarily to an increase in thickness of the muscle fibers.—W. D. Neff.

1762. Walter, W. G., Dovey, V. J., & Shipton, H. Analysis of the electrical response of the human cortex to photic stimulation. *Nature, Lond.*, 1946, 158, 540-541.—Using a "high power stroboscope" (for flashes of light reasonably constant in intensity and 10 μ sec. duration), an electronic system for continuous automatic frequency analysis, and "a four-channel ink-recording electro-encephalograph, the responses evoked by flickering light in a number of normal subjects and a few clinically abnormal ones have been studied." Sample records are presented and the results summarized: "(1) There is very great variation between individuals in respect of: (a) amplitude of response, (b) selectivity of the response at different frequencies, (c) effect of other external stimuli and mental activity, and (d) constancy from time to time. . . . (2) In children below the age of 12-14 years (and in a few young adults) the responses were relatively large (of the order of 100 μ v.) at the lowest frequencies; but insignificant above 6-7 f/s. . . . (3) In all subjects, analysis of the response showed considerable harmonic content, particularly at flicker rates from 1 to 7 f/s. . . ." (4) Comment is made on synchronization of the

flash with brain rhythms, particularly in the case of epilepsy.—A. C. Hoffman.

1763. Young, J. Z. Effects of use and disuse on nerve and muscle. *Lancet*, 1946, 251, 109-113.—It was found that regenerating fibers reaching the peripheral organs were large whereas regenerating fibers not allowed to do so were very small in diameter. Atrophy and hyperexcitability of a nerve fiber may also take place in the absence of connections with higher centers of the nervous system, but there is as yet no evidence that hypertrophy takes place in the presence of such higher connections. Although there appears to be a sharp boundary between nervous and muscular tissue, a muscle undergoes rapid atrophy when denervated; this atrophy may be in part prevented, however, if the muscle is exercised (made to contract to electrical stimulation). Muscles recover their volume (hypertrophy) with the return of nerve fibers to the old end-plate regardless of whether those nerves are regenerations of the old nerve or are fibers which do not normally control the muscle. Sense organs atrophy in the absence of external stimulation or when isolated from the central nervous system by sectioning of their nerves. This survey of the conditions making for atrophy or hypertrophy suggests a principle of double dependence: the continued existence of each of the structures mentioned depends both upon stimulation received and upon stimulation given in turn by it.—A. C. Hoffman.

[See also abstracts 1769, 1783, 1792, 1794, 1826, 1838, 1863, 1886.]

RECEPTIVE AND PERCEPTUAL PROCESSES

1764. Agarwal, R. S. Functions of the eye. *Antiseptic, Madras*, 1946, 43, 778-780.—A simple exposition of the functions of the eye: the act of seeing, binocular vision, expression, movement of the eyeball, central fixation, function of the eyelid, and vision of the normal eye.—F. C. Sumner.

1765. [Anon.] Physiological and optical data for construction and use of telescopes (Physiologisch-optische Unterlagen für Konstruktion und Gebrauch von Fernrohren.) (1941; Publ. Bd. No. 51442.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 25. \$1.00, microfilm; \$2.50, photostat.—The various physiological properties of the human eye analyzed and discussed in this document play an important role in the construction of telescopes. Properties such as adaptation, contrast sensitivity, binocular vision, and visual acuity are explained with the aid of graphs.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1766. Anson, Barry J., & Bast, Theodore H. The development of the auditory ossicles and associated structures in man. *Ann. Otol., etc., St Louis*, 1946, 55, 467-494.—The development, particularly during foetal life, of the ossicles is described.—A. C. Hoffman.

1767. Bienfang, Ralph. (U. Oklahoma, Norman, Okla.) *The subtle sense*. Norman: University of Oklahoma Press, 1946. Pp. ix + 157. \$2.00.—The introduction to this popular treatment of the sense of smell is followed by a discussion of the physiology of olfaction, the chemical substances which serve as olfactory stimuli, and the factors which determine the effectiveness of such odorophores. Attention is then given in turn to the importance of odor in particular environments, in the enjoyment of food, in social relations, as a warning signal, in business, in remembering, in therapy, for handicapped individuals, and in literature. A method for analyzing odors is suggested. 32 references.—D. W. Taylor.

1768. Blanché, R. *La vision du peintre et la psychologie de la perception*. (The painter's visual experience and the psychology of perception.) *J. Psychol. norm. path.*, 1946, 39, 153-180.—The author takes issue with the "classical" view that there is an immediately given fundamental experience in vision which is promptly elaborated and individualized in the light of the perceiver's past experience and acquired attitudes. He holds, on the contrary, that to reduce a visual scene to something approximating the raw sensory data which it provides requires considerable intellectual effort and sometimes even — as witness the laws of perspective — recourse to geometry. No visual experience can ever occur divorced from an apperceptive background of biological tendencies (which dispose us to see significant concrete objects in our environment) and from individual attitudes acquired through experience. "The painter paints with his eyes." How an artist will reproduce a scene does depend on how he sees it as well as on his knowledge and use of accepted techniques; but his knowledge of those techniques will have much to do with the way he sees the scene. Further, as with ambiguous figures, there is "complementarity"—mutual incompatibility among the several aspects of a visual experience which may prevail at any instant. The artist cannot faithfully reproduce at the same time contour, color, and shading because he can never see them simultaneously *sub specie picturae*.—M. Sheehan.

1769. Callahan, Alston, & Redlich, Frederick C. *Electroencephalography and ophthalmology*. *Amer. J. Ophthal.*, 1946, 29, 1522-1533.—Recordings of electrical eye potentials following eye movements, observed only when the retina is present, are believed to be due to corneo-retinal potential differences. Opening and closing the eyes in the dark and in the light produce similar changes in the occipital rhythm. There was no characteristic finding in amblyopia ex anopsia. The effect of opening the eye on the normal occipital rhythm does not differentiate true from malingered or hysterical blindness. Galvanic skin responses recorded on stimulation of a seeing eye can be used to differentiate blind from seeing eyes, thus identifying malingered blindness. 51 references.—D. J. Shaad.

1770. Collens, William S., Zilinsky, James D., & Boas, Louis C. *Impaired vibratory sense in diabetes*. *Amer. J. Med.*, 1946, 1, 638-641.—In diabetics with peripheral neuritis 90% had impairment in vibratory sense in upper extremities, while 98% had impairment in lower extremities. Impairment in vibratory sense occurs almost as frequently and severely in diabetics without symptoms of neuritis as it does in diabetics with neuritic symptoms.—F. C. Sumner.

1771. Davis, H. *Effects of noise on hearing*. (Prog. Rep. Nos. 1-7, 1942-1943; Publ. Bd. No. 41037.) Washington, D. C.: U. S. Dep. Commerce, 1946. Pp. 8. \$1.00, microfilm; \$1.00, photostat.—Experiments were carried out with human and animal subjects in order to determine the effect of routine exposures to loud tones upon hearing. The experiments were conducted at various frequencies, intensities, and duration times. Progress Report No. 7 contains a brief summary of the final report and deals with the hearing loss, loudness loss, diplacusis, and articulation loss. These progress reports cover work performed under the auspices of the Committee on Medical Research of the Office of Scientific Research and Development (Contract OEM cmr-194).—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1772. Dethier, V. G., & Chadwick, Leigh E. *Rejection thresholds of the blowfly for a series of aliphatic alcohols*. (1946; Publ. Bd. No. 47071.) Washington, D. C.: U. S. Dep. Commerce, 1946. Pp. 16. \$1.00, microfilm; \$2.00, photostat.—This report describes tests with the blowfly *Phormia regina* Meigen in order to determine the stimulating effect of a series of alcohols after extirpation of the antennae and labella, which are its sole loci of olfactory receptors. The proboscis response after stimulation of the tarsal receptors was noted. All test solutions were prepared with 0.1M sucrose as a base. The results of the tests are summarized in Table 1, together with the values of several properties of the alcohols which are of interest to the interpretation of the data. A high degree of correlation was found between the mean concentrations of the alcohols at rejection threshold and such properties as boiling point, vapor pressure, molecular surface, molecular moment, water-oil distribution coefficients, standard free energies, and activity coefficients. The mechanism of the method of sensory reception is discussed. Bibliography.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1773. Doesschate, J. Ten. *Visual acuity and distribution of percipient elements on the retina*. *Ophthalmologica*, 1946, 112, 1-18.—Theoretically one might expect visual acuity to be approximately proportional to the density of the percipient units, but these latter are not identical with the retinal elements (cones). For the central portion of the retina and up to 10 degrees of eccentricity each cone is probably to be considered as such a percipient unit. Beyond this area the visual acuity is less. This discrepancy may be explained by the fact that a

perceptible unit is formed of groups of elements (cones). It may be assumed that the perceptible units occupy the optic nerve wholly, unless we accept that in the fovea the cones form groups. If we do not accept this last supposition, then we are forced to accept concerning the rods either that probably a group of cones as well as a group of rods are represented in one and the same nerve fibre or that the rods are in general not perceptible elements. This first hypothesis formulated in a slightly different manner, would be to the effect that the peripheral units as groups are commonly formed of rods and cones. Such explanation of the facts would be in agreement with the duplicity theory as well as with certain conceptions of the quantum theory in respect to the visual sense.—*F. C. Sumner.*

1774. Fisher, Gilbert E. The prevention of conduction deafness. *J. med. Ass. St. Ala.*, 1946, 16, 196-198.—The author reports findings, which confirm those of S. J. Crowe of Johns Hopkins, to the effect that in impaired hearing for high tones with good hearing for low tones, which is extremely common in children, examination with an electric nasopharyngoscope reveals in the large majority of cases an enlarged mass of lymphoid (adenoid) tissue in the nasopharynx, partially or completely obstructing the Eustachian tubes, causing hypersecretion of mucus, and ultimately giving rise to more and more extensive malfunctioning of middle ear structures. Removal of this lymphoid tissue restores hearing for high tones. The author believes audiometric and nasopharyngoscopic examination of school children should be made a part of the routine health examination of public school children with a view to the prevention of hearing difficulty of this kind.—*F. C. Sumner.*

1775. Froeschels, Emil, & Beebe, Helen. Testing the hearing of newborn infants. *Arch. Otolaryng.*, Chicago, 1946, 44, 710-714.—Noting the blinking, grimaces, body withdrawal, turning toward the source of sound, and expressions of pleasure or pain as signs of response to Urbantschitsch's whistles and tuning forks, the hearing of 33 infants (3-9 days in age) was examined. No reaction to the tuning forks was noted; the most frequent reaction to the more intense whistles was blinking. A chart is presented of the whistles to which response was made, proving "the presence of hearing in the great majority of newborn infants."—*A. C. Hoffman.*

1776. Harris, J. Donald. (U. S. Submarine Base, New London, Conn.) The effect of signal-noise levels on pitch discrimination in masking. *J. acous. Soc. Amer.*, 1947, 19, 293.—Abstract.

1777. Harris, J. Donald. Free voice and pure tone audiometer for routine testing of auditory acuity; studies on comparative efficiency. *Arch. Otolaryng.*, Chicago, 1946, 44, 452-467.—This review of pertinent research is concerned with the comparative efficiency of audiometer and speech methods of determining auditory acuity. It was the consensus of most studies that a careful voice test and pure tone audiometry through the speech range (512-

2,048 cycles) measure almost the same auditory function, and the results of the two methods for normal subjects are closely related in linear fashion. Routine audiometer tests can be expected to be accurate to within 5 decibels; the reliability of the whispered-voice tests may be about the same if the subjects are near-normal, but not if they are suffering from various degrees of deafness, since not only distance but intensity of the voice is involved. The audiometer method takes about a third less time to test the same range as the voice tests. "A statement is given of the relative applicability of voice and pure tone tests for a variety of specific situations."—*A. C. Hoffman.*

1778. Hartridge, H. Colour receptors of the human fovea. *Nature, Lond.*, 1946, 158, 97-98.—"When white light from a small metal filament electric lamp is caused to move slowly over the fovea, as a narrow exploring pencil, in some places it appears red, in other places green, and in still other places blue. . . . The precise position in the fovea of some of these specific points has been determined with reference to the point of fixation. . . . Between these foveal points with specific colour responses are numerous other points having a non-specific response which may be either white or yellow." Similar results were found using chromatic light sources. It is held that Young's trichromatic theory is substantially correct; but in agreement with Granit's results from micro-electrode stimulation of animals' eyes, there are in addition either yellow receptors, white receptors, or both. (Further comments appear on p. 301 of the same volume.)—*A. C. Hoffman.*

1779. Hartridge, H. Fixation area in the human eye. *Nature, Lond.*, 1946, 158, 303.—Despite alterations in the parts of the micro-stimulator apparatus, in adaptation, in degrees of accommodation, etc., it was found that relative to a small scotoma for red rays in the author's fovea the position of a green fixation point remained relatively constant. The relative positions of fixation points for other colors (660, 620, 580, 540, 500, 460, and 420 mμ) were then determined. The results are presented in a table and a chart. In further experiments a small colorless light moved slowly over the retina was seen as red, orange, green, pale blue-green, and grey-blue; a red source was sometimes seen as orange and as pale orange; orange, as red and very pale orange; a yellow micro-source as red, orange, green, and white; green, as very pale green, occasionally white; and a blue light looked pale blue-green, or grey. The evidence is regarded as supporting the cluster hypothesis (receptors of similar, or nearly similar, response are located in groups or clusters) and the Wundt-Granit hypothesis (retinal receptors for each of the colors named above).—*A. C. Hoffman.*

1780. Hartridge, H. Response curve of the yellow receptors of the human fovea. *Nature, Lond.*, 1946, 158, 946-948.—The response curve of the yellow receptor in the human fovea was obtained by two methods based on the finding that a yellow test

object appears white when either the intensity or the visual angle is reduced: (1) Since the test object becomes yellow again if a second "conditioning" object reflecting yellow rays is placed near it in the visual field, a conditioning light source was varied in wave length at various intensities until the yellow test source appeared white. The crucial wave lengths were plotted against the log of the intensity. (2) The difference was noted between the ordinates of the luminosity curve for the light-adapted fovea and of the curve for the fovea with a 20 min. test object at a low intensity of illumination. The response curves from both methods were alike in having maxima at about 585 m μ and in being of the very narrow type found by Granit for lower animals. Using method (1), narrow response curves were also found for red and for green. "... these three [response curves] appear to be too sharp for the light-adapted luminosity curve to be produced by their summation, thus indicating the presence of other receptors in the long-wave region of the visible spectrum."—A. C. Hoffman.

1781. Houghten, Mattie L. [Comp.] Bibliography on noise measurement; arranged alphabetically in two chronological groups. *U. S. Bur. Ships tech. Lit. Res. Ser.*, 1945, No. 37. Pp. 52.—An annotated bibliography (with subject index) of 131 publications on noise measurement from the engineering and human behavior points of view.—C. M. Louttit.

1782. Hughes, J. W. The threshold of audition for short periods of stimulation. *Proc. roy. Soc.*, 1946, B133, 486-490.—To study the rise in auditory threshold as duration of stimulus is reduced, tones at various frequencies (250, 500, 1,000, 2,000, and 4,000 c.p.s.) were presented to two observers (10 trials at each frequency with one observer, 5 with the other) for various durations (0.063, 0.117, 0.177, 0.241, 0.427, 0.611, and 0.739 sec.) by means of a heterodyne-oscillator-amplifier system. The mean of two determinations of threshold for the shortest duration was taken as the reference level. "The average value of threshold, in decibels below the reference level, was calculated for each duration of each note separately for each observer. These averages, when plotted against the duration of the note, were found to lie on a smooth curve. When the averages in decibels were converted to energy ratios, i.e., the ratios of the threshold intensity at any duration to that at the shortest duration, and these ratios were plotted against the reciprocals of the times of presentation, the curves became straight lines." Equations for these curves are derived which are regarded as having the same form as the chronaxic equation of Lapicque.—A. C. Hoffman.

1783. Jaeger, Rudolph. Neuralgic syndromes of the head; anatomy and physiology of sensory nerves to the head. *Arch. Otolaryng.*, Chicago, 1946, 44, 424-442.—The symptoms, causes, treatment, and neural mediation of pain syndromes of the head are discussed.—A. C. Hoffman.

1784. Kobrak, H. G. (U. Chicago, Chicago, Ill.) Observation of cochlear structures during the process of hearing. *J. acous. Soc. Amer.*, 1947, 19, 292.—Abstract.

1785. Lende, Helga. Directory of periodicals of special interest to the blind in Canada and the United States. New York: American Foundation for the Blind, 1947. Pp. 22. \$0.35.—A bibliography giving publishers addresses and a description of periodicals in inkprint, Braille, and recorded, designed for use by the blind.—C. M. Louttit.

1786. McFarland, R. A., Halperin, M. H., & Niven, J. I. Visual thresholds as an index of the modification of the effects of anoxia by glucose. *Amer. J. Physiol.*, 1945, 144, 378-388.—The ingestion of glucose was found to prevent or relieve the visual impairment resulting from anoxia. Differential intensity thresholds at low brightness levels were used to determine visual impairment. Anoxia was produced by simulating altitudes of 12,700 to 17,200 feet. Administration of glucose to fasting subjects at normal atmospheric oxygen tension had no effect upon visual sensitivity as measured. Analysis of the time relationships between visual sensitivity, blood sugar changes, and carbon dioxide production led to the conclusion that the "anti-anoxic" effect of glucose "seems to depend directly on the blood sugar level rather than on the secondary increase in carbon-dioxide production."—W. D. Neff.

1787. Minton, J. P. Diplacusis and acuity of hearing. *Arch. Otolaryng.*, Chicago, 1946, 44, 184-190.—The author describes in detail his temporary case of diplacusis (following injury of the right ear due to a dynamite explosion) and discusses the possible mediation of the phenomena observed. There may have occurred a temporary shift in the relative positions of the basilar membranes corresponding to 2,550 and to 650-750 cycles. A resonance effect noted in the right ear was probably due to an over-emphasis of the frequencies for which acuity remained normal (500-1,000 cycles). The tinnitus in the region of 8,000 cycles and the noise with pure tone stimuli were probably produced in the auditory nerves and in the internal ear respectively. "The effects described in the present paper indicate that threshold tests at various single frequencies may be at times threshold tests for subjective impure tones excited by the pure tone stimuli."—A. C. Hoffman.

1788. Morrisett, Leslie E. The aural rehabilitation program of the U. S. Army for the deaf and hard of hearing. *Ann. Otol.*, etc., St. Louis, 1946, 55, 821-838.—The rehabilitation program for the deaf and hard of hearing organized by the Otolaryngology Branch in the Surgical Consultants Division of the Surgeon General's Office is described.—A. C. Hoffman.

1789. Morrow, Charles T. (Harvard U., Cambridge, Mass.) Reaction of small enclosures on the human voice. Part I: Specifications required for satisfactory intelligibility. *J. acous. Soc. Amer.*, 1947, 19, 293.—Abstract.

1790. Nutt, A. B. **Binocular vision.** *Brit. orthopt. J.*, 1945, 3, 44-47.—Two stages in the production of binocular vision are explained: (1) the presentation of two suitable uni-ocular sensations and (2) the elaboration of these into a unitary perception. The author attempts in the light of Sherrington's experiments on binocular flicker an explanation of the fusion of the two sensations.—F. C. Sumner.

1791. Penhale, Kenneth W. (55 East Washington St., Chicago, Ill.) **Pain and its significance in oral surgery.** *J. Amer. dent. Ass.*, 1946, 33, 1399-1406.—The pains which bring persons to the dentist have diagnostic value for the dentist. The author proposes to bring these subjective dental pain experiences into relationship with specific pathological conditions.—F. C. Sumner.

1792. Pirenne, M. H. **On physiology and consciousness.** *Brit. J. Psychol.*, 1947, 37, 82-86.—Modern physiological information relates to the pattern of nervous excitation in the central nervous system, but not to the resulting conscious sensation. Fechner's sensation was defined and measured in terms of stimulus intensity, and again is not the same as conscious sensation. Moreover, deductions from the nature of conscious sensation may lead to incorrect hypotheses as to the physiological and anatomical basis of sensation. The concept of consciousness does not belong to physiology; thus the physiological study of the nervous system can neither support nor refute the view that our representations of the world bear no relation to the nature of the world.—M. D. Vernon.

1793. Reiher, H., & Meister, F. J. **The sensitivity of the human body to vibrations.** (Empfindlichkeit des Menschen gegen Erchütterung.) (AAF T-2 Translation 616, 1946; Publ. Bd. No. 42296.) Washington, D. C.: U. S. Dep. Commerce, 1946. Pp. 15. \$1.00, microfilm; \$1.00, photostat.—This report describes experiments to determine the effect of vertical and horizontal vibrations upon the human body. A platform was set into sinusoidal vertical and horizontal vibration of various amplitudes. The persons to be observed lay or stood on this platform so that the vibration was either along or across their body axis. The findings are expressed in diagrammatic form and show that no single quantity characterizing the vibration (amplitude, frequency, velocity, or acceleration) expresses basically the strength of sensation. The threshold of vibratory perception depends on a constant value of the product of the frequency and amplitude, and thus on a constant vibratory velocity; while the characteristic of the boundary of danger varies with the case under consideration. Diagrams of the testing apparatus and a bibliography are included. This is a translation of a German article which appeared in *Forschung* (VDI, Berlin), v. 2, No. 11, in November 1931.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1794. Rønne, Henning. (University Eye Clinic, Copenhagen.) **Die Architektur der menschlichen**

Sehbahn. (The architecture of the human visual path.) *Acta psychiat. Kbh.*, 1944, Suppl. 28, Pp. 53.—An historico-critical review and discussion of our knowledge concerning the human neurovisual system is presented under the following headings: (1) The nerve-fibre layer of the retina; (2) the optic nerve; (3) the chiasm; (4) the optic tract; (5) the external geniculate body; (6) the occipital visual path; and (7) the cortical visual centre. 167-item bibliography.—A. L. Benton.

1795. Sachs, Erich. **Abnormal delay of visual perception.** *Arch. Neurol. Psychiat., Chicago*, 1946, 56, 198-206.—The use of the Pulfrich effect as a diagnostic method and device for clinical investigation is described. The normal Pulfrich effect occurs when there is a certain brightness difference between the stimulation of the two eyes, presumably involving a unilateral delay in transmission and perception of visual impulses. Examination of 74 patients indicated abnormal unilateral delays in 5 or possibly 6 patients. It is suggested that early pathological changes in the optic nerve may be investigated or detected by determination of the magnitude of the unilateral brightness reduction required to produce the Pulfrich effect.—K. S. Wagoner.

1796. Sheard, Charles. (Mayo Foundation, Rochester, Minn.) **Effects of increased intrapulmonary pressure on dark adaptation.** *J. Aviat. Med.*, 1946, 17, 526-532.—The inhalation of 100% oxygen at altitudes of about 36,000 feet or less is sufficient to maintain the arterial oxygen saturation at normal levels. At altitudes above 36,000 feet 100% oxygen must be breathed under pressure (pressure breathing) in order to maintain normal arterial saturations. Since the visual threshold is a sensitive indicator of anoxia, the author used this measure to determine the effectiveness of pressure breathing at altitudes of 37,500, 42,000, and 43,000 feet. At altitudes of 42,000 and 43,000 feet, the rod threshold increased about 0.75 log units above normal for one subject breathing 100% oxygen at atmospheric pressure. With increased intrapulmonary pressure at these altitudes, the visual thresholds are normal. In general, anoxia affects the cone threshold less than the rod threshold.—A. Chapanis.

1797. Smith, G. M., Seitz, C. P., & Clark, K. B. (City Coll., New York.) **Variations in the angioscotoma in response to prolonged mild anoxia.** *J. Aviat. Med.*, 1946, 17, 590-595.—The peripheral blind areas (angioscotomata) of 15 subjects were measured 5 times during a 7.5 hour exposure to a simulated altitude of 10,000 feet. Control tests were made at a simulated altitude of 1,800 feet with the same subjects. There is a statistically significant increase in the size of the scotoma at altitude. The results also show a progressive and significant increase in the size of the scotoma throughout the test period at altitude.—A. Chapanis.

1798. Sparrow, R. **The art of seeing.** *Brit. orthopt. J.*, 1945, 3, 39-43.—A number of cases of emmetropia, hypermetropia, and myopia are re-

ported in which considerable improvement of visual standard has been obtained by use of methods primarily intended to rectify muscle imbalance.—F. C. Sumner.

1799. Stewart, James V., & Barrow, D. W. Concussion deafness. *Arch. Otolaryng., Chicago*, 1946, 44, 274-279.—Audiometric testing of 100 previously normal gunnery instructors after from 6 weeks to 30 months exposure to range firing revealed seemingly permanent hearing losses beginning in the high tones (2,048-11,584 cycles) and later including tones in the speech range. The average loss was about 20 decibels, but with wide variation in individual susceptibility.—A. C. Hoffman.

1800. Stiles, W. S. Separation of the 'blue' and 'green' mechanisms of foveal vision by measurements of increment thresholds. *Proc. roy. Soc.*, 1946, B133, 418-434.—After several minutes adaptation to a circular (18° in diameter) patch of orange ($615\text{ m}\mu$) light (the conditioning field), the subject (20 in all) reduced to the limit of visibility the intensity of a square (1° each side) patch of blue ($470\text{ m}\mu$) light superimposed on the conditioning field in flashes of 0.2 sec. once in every 1.4 sec. Four or more settings were made at each of 12 intensities of the conditioning field. Curves of the log of the luminal brightness increment plotted against the log of the intensity of the conditioning field are presented for each subject. To eliminate the effect in these curves due to rod vision, adaptation curves for the cones—recovery from intense light adaptation—were determined for these subjects and appropriate corrections made. Analysis of the curves revealed two components (low- and high-intensity portions), indicating the operation of two cone mechanisms in foveal vision identified as 'green' and 'blue.' Individual differences in the sensitivity of the 'green' and 'blue' mechanisms are described.—A. C. Hoffman.

1801. Sullivan, Joseph A. A statistical analysis of audiometric surveys in the Royal Canadian Air Force. *Ann. Otol., etc., St Louis*, 1946, 55, 839-858.—A mobile soundproof room, audiometric test equipment, and articulation tests used for aural examination of air personnel are described in detail with particular emphasis on the calibration, specifications, limitations, and uses of the test equipment. Comparison of pure tone with articulation test (whispered voice) thresholds for 137 men (245 normal ears and 29 abnormal ears) showed a significant correlation of .69. In the case of 59 men chosen because they showed a hearing loss in the whispered-voice test (98 abnormal ears and 20 normal), a significant correlation of .85 was found for the same comparison. When 4,687 aircrewmen and groundcrewmen were audiometrically tested at the standard level of 20 decibels at 256, 512, 1024, 2048, and 4096 cycles, 78% of the aircrew and 67% of the groundcrew passed this standard. Comparison of the audiometer test and whispered-voice test results of these 4,687 men showed that 90% (4,198) passed both tests, 9% (435) passed the whispered-

voice but failed the audiometric test, and 1% (54) failed both tests. Of the men in this group who failed either test, 50% recorded a history of previous ear trouble and 31% on examination had positive findings in the ear. These results need not necessarily apply to an unselected civilian group.—A. C. Hoffman.

1802. Swift, J. H., & Balkwill, N. F. Some experimental work in stereoscopic vision and visual acuity. *Brit. orthopt. J.*, 1945, 3, 48-52.—Three experiments are reported here. The first, having to do with the relation between intelligence and the recognition of the letters of the Snellen's Test Chart, yielded no significant association between these two factors. The second experiment concerned the question of the relation between intelligence and stereoscopic acuity, the latter being measured by the Five-pin test. No significant association was found between these two factors. In this experiment it was discovered that stereoscopic vision can be improved up to a certain point after 6 to 8 weeks of daily practice. In the third experiment it was intended to ascertain the best method of measuring interocular distance, which proved to be the stereoscopic method using red and blue filters viewed through pinholes.—F. C. Sumner.

1803. Tiffin, Joseph, & Bromer, John. Analysis of eye fixations and patterns of eye movement in landing a Piper Cub J-3 airplane. (CAA Div. Res. Rep. No. 10, 1943; Publ. Bd. No. 50289.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 38. \$1.00, microfilm; \$3.00, photostat.—Motion pictures of the eye-movement patterns of pilots during the last 5-10 seconds before landing were analyzed to determine whether certain of them were characteristic of the skilful pilot. It is concluded that there are no clear-cut differences between eye-movement patterns of the experienced and inexperienced pilots. Experienced pilots, however, show back-and-forth excursions until the last 5 seconds before landing. It is recommended that instructors not insist that students learn to look at a certain specified place while the airplane is being landed. A supplement presents two pertinent reports (1941) of progress on a study of visual depth perception in aviation, conducted by Carl Pfaffmann.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

1804. Van der Velden, H. A. The number of quanta necessary for the perception of light of the human eye. *Ophthalmologica*, 1946, 111, 321-331.—Here is described a method of determining the number of quanta which the visual purple must absorb in order that light be perceived. This number is deduced from statistical data based on observation of sudden flashes, without having to know about the part of the light absorbed by the visual purple. A theoretical formula is established which corresponds with the experimental curve.—F. C. Sumner.

1805. Vries, H. de. Concentration of visual purple in the human eye. *Nature, Lond.*, 1946, 158, 303.—According to the measurements of Van der Velden, the efficiency of the human retina is some-

times such that every quantum of light that reaches the retina is absorbed. This would imply that in the extreme case of very high density of visual purple (as, e.g., after dark adaptation) the absorption would be 100%, irrespective of wave-length, and the maximum at 505 m μ would be flattened out. Accordingly, the subjective brightness of a 10° test field, half of which was illuminated by 505 m μ and the other by 580 m μ , was noted during 3 hours of dark adaptation. "No influence of adaptation on the match was found, whereas an effect of 5 per cent would have been detected. This means that the absorption of the visual purple was smaller than 10 per cent at 505 m μ ."—A. C. Hoffman.

1806. Walker, J. P. Spencer. Myopia and pseudo-myopia. *Brit. orthopt. J.*, 1945, 3, 34-38.—Pseudo-myopia is in reality synonymous with spasm of accommodation and is frequently confused with genuine myopia. For a differential diagnosis all patients under 16 years of age should be refracted under atropine administered twice a day for 3 days. Especially is this necessary in those myopes who accept a lens of higher power than their refraction would warrant. In pseudo-myopia the vision is variable.—F. C. Sumner.

[See also abstracts 1753, 1822, 2009, 2027.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

1807. Blodgett, Hugh C., & McCutchan, Kenneth. Place learning and anticipation. I. Anticipation as failure of place discrimination. *J. comp. Psychol.*, 1946, 39, 351-357.—This experiment was designed to test the hypothesis that anticipation in the elevated, semi-linear maze is the result of failure to discriminate between the places of the last two choice points. In the first maze used the distance between these choice points was 20 inches. A group of rats showed marked anticipation. After 30 days of training only 4 rats had eliminated the next to the last cul. When the distances between the choice points was increased to 54 inches, all of another group of rats eliminated this cul in 11 days. It was concluded that the evidence supports the hypothesis. K. F. Muenzinger.

1808. Brown, W. Lynn. The effects of a common start-finish locus on orientation and behavior in a multiple-T maze. *J. comp. Psychol.*, 1946, 39, 331-338.—One group of rats was run in a 12-unit T-maze in which the goal box was identical with the starting box and was reached by a right-hand turn at the last point of choice. The condition "did not disturb general goalward orientation in any part of the maze." Another ran the same maze, except that the goal was now not in the starting box but at the end of the left-hand turn of the last point of choice. "Both groups of animals developed a similar pattern of errors in the first seven sections of the maze." Further changes in conditions produced little change

in the rats' behavior. "The results seem to indicate that maze performance, in the maze used, is largely maze contained."—K. F. Muenzinger.

1809. El-'Alem, Mahmoud A. Les bases psychologiques de la création. (Psychological foundations of creative processes.) *Egypt. J. Psychol.*, 1946, 2, 303-319.—After discussing the associationist explanation of mental creativity, which depends upon a new combination of unchanged elements, the author emphasizes the fundamental changes occurring in the entire psychological life during the elaboration and completion of the creative act. All creation is a restructurization in which the new function is organized and integrated. The creative act is the highest type of mental life, maintained at a high level of nervous tension.—G. S. Spear.

1810. Ellis, Robert S. (Pomona Coll., Pomona, Calif.) The "laws" of relative variability of mental traits. *Psychol. Bull.*, 1947, 44, 1-33.—A survey is presented of the present status of knowledge and a critical examination made of the various generalizations and "laws" of the relative variability of mental traits. The historical background of the topic and the mechanism of variation are discussed. The "laws" of relative variability are analyzed in terms of the following: complexity vs. simplicity, functions vs. structures, symbolic vs. concrete, recent vs. ancient, specific vs. generic, less relevant vs. more relevant, less used vs. most used, effects of practice, forgetting, fatigue, age differences, variability and change, sex differences, race differences, and differences within the individual. 109-item bibliography.—S. Ross.

1811. Friedlander, H. F. The recalling of thoughts. *Brit. J. Psychol.*, 1947, 37, 87-95.—Introspection shows that there is no direct recall of thought separated from its verbal expression or any other sensuous support. The original wording is often forgotten at recall and replaced by other wording. The traces of thoughts and words remain closely connected and form a unity which yet allows of a change in words or thoughts or both. Whether the retention of thoughts is influenced by the way in which they are expressed may be studied by comparing the retention of thought expressed in the mother tongue with that of thoughts expressed in a foreign language. It was found that one observer retained more accurately material expressed in the mother tongue, whereas two others, showed little difference. But in the latter case, they may have paid greater attention to the material expressed in a foreign tongue, and hence remembered it better.—M. D. Vernon.

1812. Gellhorn, Ernst. Is restoration of inhibited conditioned reactions by insulin coma specific for Pavlovian inhibitions? Contribution to the theory of shock treatment. *Arch. Neurol. Psychiat., Chicago*, 1946, 56, 216-221.—In a series of experiments upon 11 rats it is indicated that "a conditioned escape reaction inhibited through lack of reinforcement is restored by insulin coma and related procedures, as shown in previous studies. If, however, the escape reaction is abolished by countershock, i.e., by a shock

applied to the adjacent compartments into which the rat escapes, treatment with insulin coma does not restore the escape reaction." The author suggests that "the recovery of inhibited conditioned reactions with insulin coma is due to increased hypothalamic discharges to the cortex, which, according to investigations of Murphy and Gellhorn, may make subthreshold cortical processes supraliminal."—K. S. Wagoner.

1813. Myers, C. S. A new analysis of intelligence: a critical notice. *Occup. Psychol., Lond.*, 1947, 21, 17-23.—The publication of Richard Meili, *L'Analyse de l'Intelligence* (see 20: 3527), is reviewed in some detail. Meili's experimental material is derived from data collected by B. Schapira and himself from 30 well-educated adults, 40 schoolgirls aged 9 to 11, and 50 girls aged 12 to 13. Tests used were a mosaic test, concealed figures, picture completion, picture arrangement, sentence composition, card sorting, text reproduction, picture titling, and problem solving, individually administered. The data were subjected to factor analysis, and 4 principal factors were identified: plasticity, complexity, fluency, and globalization.—G. S. Speer.

1814. Siegel, Paul S. Alien drive, habit strength, and resistance to extinction. *J. comp. Psychol.*, 1946, 39, 307-317.—This study examines Hull's hypothesis that an alien drive increases resistance to experimental extinction. With a 22-hour food deprivation 40 rats were given 5 reinforcements in a Skinner box, and another group of 40 rats were given 40 reinforcements. Prior to extinction one half of each group were then given a 22-hour water deprivation in addition to the 22-hour food deprivation, while the other two subgroups were motivated by hunger alone. The results showed a decrease in extinction time instead of the expected increase on the basis of Hull's hypothesis. None of the differences were statistically significant, but their agreement in direction was assumed to argue "for a true negative difference." (See also 18: 22.)—K. F. Muenzinger.

1815. Wherry, Robert, J., & Rethlingshafer, Dorothy. (U. North Carolina, Chapel Hill, N. C.) A factorial analysis of the rôle of shock in brightness discrimination learning. *J. Elisha Mitchell sci. Soc.*, 1945, 61, 249-257 (also in Coker, W. C., *Studies in science*. Chapel Hill: University of North Carolina Press, 1946).—Three groups of rats are used in a brightness-discrimination learning problem involving a simple, one-unit, T-maze. All groups are rewarded with food; one group of 25 receives shock for wrong choices (SW); one group of 15 is shocked for right choices (SR); and a third group of 25 receives no shock (NS). Nine different scoring methods are devised to investigate the role of shock at various stages in the learning process. Using Fisher's 5% criterion of probable significance, the NS group is poorer than the SW group on 7 of the 9 methods, NS is poorer than SR on 6 of 9, and SR poorer than SW on 5 of 9. Factor analysis of apparent contradictions reveals 4 factors: PE (preliminary errors),

RE (repetitive errors), LE (later errors), and SI (slowness of insight). The first factor, PE, clearly differentiates the 3 groups. On factor RE, the groups are not reliably differentiated. The third factor, LE, separates all 3 groups reliably, and the fourth factor, SI, fails to separate reliably the SR and SW groups, although each is significantly separable from the NS group. The study demonstrates the utility of multiple scoring in clarifying the role of shock in discrimination learning and the applicability of factor analysis to such problems.—J. J. Kane.

1816. Wickens, Delos D. (U. Wisconsin, Madison, Wis.) Studies of response generalization in conditioning. III: Stimulus variation as a factor in response generalization. *J. Elisha Mitchell sci. Soc.*, 1945, 61, 258-263 (also in Coker, W. C., *Studies in science*. Chapel Hill: University of North Carolina Press, 1946).—A group of 59 subjects participated in this experiment to determine if response generalization is affected by the nature of the conditioned stimulus employed. Conditioned withdrawal of a finger to a tone was established in a shock situation where the subject's hand was strapped palm down to an electrode, and an extensor movement was required to lift the finger. After this, the hand was turned over so that a flexor movement was necessary to make the withdrawal response. In the transfer situation, 27 of the subjects were given the same stimulus to which they had been conditioned (a tone of 256, 512, or 1,024 c.p.s.), 16 subjects received a tone differing by one octave, and 16 received a tone differing by two octaves. In this case, the conditioned stimulus was repeated 10 times without reinforcement. Twenty-one of 25 who responded to the same tone gave a generalized response, i.e., withdrawal, while all 22 who responded to the generalized stimulus gave the generalized response. "While the results would not be contrary to any learning theory, they are especially pertinent to the Guthrie type of theory which places considerable emphasis on the prediction of the muscular form of the response, and on the factors which tend to produce variation in its form." (See also 18: 437, 696.)—J. J. Kane.

[See also abstracts 1828, 1833, 2036.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

1817. Babsky, Eugene B., & Minajev, P. F. Combined action upon muscle of adenosine triphosphate, acetylcholine and potassium, calcium and magnesium ions. *Nature, Lond.*, 1946, 158, 238.—Work with the dorsal muscle of the leech and the m. rectus abdominis of the frog indicates that adenosine triphosphate, potassium, and magnesium, but not calcium, increase the sensitivity of muscle to acetylcholine.—A. C. Hoffman.

1818. Bayley, Nancy, & Bayer, Leona M. (U. California, Berkeley, Calif.) The assessment of somatic androgyny. *Amer. J. phys. Anthropol.*, 1946,

4, 433-461.—A detailed exposition of the methodology is given whereby a rating scale was devised for assessing somatic androgyny, i.e. sex differentiation in body build in young adults of both sexes. Standards are presented in the form of illustrative photographs, detailed descriptions, and a rating chart for constructing individual profiles. Subjects are rated on 8 items: surface modeling, shoulder girdle, waist line, hip flare, buttocks, thigh form, interspace (whole leg), and muscle bulge (lower leg); supplementary criteria on which subjects are rated are: penis size, breast size, body hair density, pubic pattern, bicristal/biacromial index, and strength (grip). Ratings are according to both degree and direction of sexual differentiation (hypermasculine, masculine, intermediate, feminine, hyperfeminine). A substantial agreement between 4 different raters constituted the basis for the establishment of the reliability of the scale. From results obtained already on groups of boys and girls it appears that androgyny is truly a "mosaic." This method of assessing somatic androgyny is thought of value for determining the relationship of androgynous body build to personality structure.—*F. C. Sumner.*

1819. Child, C. M. Organizers in development and the organizer concept. *Physiol. Zool.*, 1946, 19, 89-148.—A summary of many investigations is presented to support the thesis that physiological gradients (graded differentials in general metabolism) are the fundamental factors determining the beginnings of polarity and symmetry in the developing organism. It is held that (a) organizers may actually be, in many instances, gradients extra- or intra-organismically produced; (b) an organizer may do no more than determine a gradient pattern; and (c) an organizer may be merely an inductor or activator rather than a determiner of organ systems. 162-item bibliography.—*A. C. Hoffman.*

1820. Dahlberg, Gunnar. Eine Theorie über die Natur der Gefühle und ein Vorschlag zur Therapie des manisch-depressiven Irreseins. (A theory on the nature of emotion and a proposal concerning the treatment of manic-depressive psychosis.) *Acta psychiat., Kbh.*, 1943, 18, 235-244.—The James-Lange and Dana-Cannon theories of emotion are reviewed, and a theory that emotions are determined by chemical factors in the blood stream is advanced. A proposed experiment involving transfusion of blood from manic patients to depressed patients, and vice versa, is outlined.—*A. L. Benton.*

1821. Dawson, W. M., & Revens, R. L. Varying susceptibility in pigs to alarm. *J. comp. Psychol.*, 1946, 39, 297-305.—"A sample of 42 sow pigs was found to vary widely in the time they required to return to feed after being scared away by an electrical sparking device. While many of the pigs were appreciably bothered by the spark at first, almost all the pigs showed very rapid adjustment to it. The element of surprise was found to be a large factor in the alarm shown by many of the pigs."—*K. F. Muenzinger.*

1822. Dunlap, Jack W., & others. Tests of the ability to take it. (CAA Div. Res. Rep. No. 11, 1943; Publ. Bd. No. 50290.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 44. \$1.00, microfilm; \$3.00, photostat.—The primary purpose of the experiment reported here was to determine whether or not a battery of reliable measures of resistance to pain and fatigue could be constructed with the anticipation that such tests could then be submitted to validation under practical flying conditions with the view to verifying or refuting the popular belief concerning the relationship between "ability to take it" and performance as a pilot. The latter step has not yet been taken, but in this report is found evidence concerning the reliability of measures tentatively designated as "ability to take it" tests. Appendix "A" presents description of the 5 out of 9 tests discarded in the preliminary phase, "B" validity studies, "C" comparison of the micrometer wedge pressure and the Howells wedge pressure, "D" description of constant stimulus shocker, and "E" instructions for the administration of constant stimulus shocker, hand dynamometer, chest ergometer, and wedge pressure test.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1823. Ewer, R. F. A response to gravity in young *Hydra*. *Nature, Lond.*, 1946, 158, 58.—Negative geotropism was observed in buds recently separated from colonies of *Hydra vulgaris* Pallas.—*A. C. Hoffman.*

1824. Festinger, Leon, & Wapner, Seymour. A test of decision time: reliability and generality. (CAA Div. Res. Rep. No. 48, 1945; Publ. Bd. No. 50320.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 51. \$2.00, microfilm; \$4.00, photostat.—This report grew out of an interest in determining the feasibility of predicting the success of a pilot in making prompt decisions in conflict situations. It describes two studies concerned with the problem. Part I describes the development of a visual line test which provides a measure of the increase in decision time in a conflict situation. Part II describes a study of the "generality" of the decision-time measure, using the test discussed in part I and 3 other tests. Appendix A presents correlations between base time and conflict time.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1825. Geldard, Frank A. A study of the sleep motility of student pilots. (CAA Div. Res. Rep. No. 28, 1944; Publ. Bd. No. 50306.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 18. \$1.00, microfilm; \$2.00, photostat.—In the early days of research on problems involved in the selection and training of aircraft pilots, one of the principal areas under investigation was that of the emotional aspects of flight training, and a study of movements during sleep was undertaken in 1939. In order to investigate this sleep behavior, a specially constructed instrument (the Simmons Kinetograph, slightly modified) was attached to the beds of a class of 12 student pilots undergoing Civilian Pilot Training. This instrument records on a graphic record all of the

major (trunk) and minor (head and limb) movements of the student while he is asleep. Tables present results.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1826. Green, D. E. (*Coll. Physicians & Surgeons, New York*.) Physiological function from the standpoint of enzyme chemistry. *Ann. N. Y. Acad. Sci.*, 1946, 47, 515-519.—The author discusses the significance of enzyme chemistry in physiological functioning. However, "the mere recognition that enzymic phenomena underlie physiological function is . . . only the first step in the biochemical analysis."—S. Ross.

1827. Kahn, Lessing A. (*U. Pennsylvania, Philadelphia, Pa.*) A discussion of some causes of operational fatigue in the Army Air Forces. *Psychol. Bull.*, 1947, 44, 34-53.—An attempt is made to clarify some of the agents which influence operational fatigue. The writer discusses definitions and symptoms. Among the causes reviewed are physical agents, geographic and climatic conditions, and emotional stresses. Several examples are presented.—S. Ross.

1828. Licklider, J. C. R., & Bunch, M. E. Effects of enforced wakefulness upon the growth and the maze-learning performance of white rats. *J. comp. Psychol.*, 1946, 39, 339-350.—The aims of this study were to determine how little sleep would suffice for white rats which normally sleep 12 to 15 hours daily, and to observe the effects of keeping rats on a regime with a minimum amount of sleep. Wakefulness was enforced by a treadmill surrounded by water. Four groups of rats were kept awake 12, 16, 20, and 24 hours respectively. All rats in the last group died in 3 to 14 days, largely from fighting. They became so hypersensitive that slight physical contacts produced vicious, aggressive behavior. The 20-hour group also became extremely irritable, but it appeared that they could have continued indefinitely with only 4 hours of sleep. A new group of rats was kept on the regime of 20 hours wakefulness. These rats were found to swim faster and learn a water maze with fewer trials and less errors than certain control groups whose sleep was unrestricted. Growth in the wakeful rats was retarded. When at the end of the experiment some 20-hour wakeful rats along with some controls were put on 28-hour wakefulness they collapsed in shorter time than the controls, showing that they had not lost a "habit" to sleep. 17 references.—K. F. Muenzinger.

1829. McCleary, R. A., & Morgan C. T. Food-hoarding in rats as a function of environmental temperature. *J. comp. Psychol.*, 1946, 39, 371-378.—Employing various temperatures between 9° C. and 34° C., the authors found that hoarding and environmental temperatures are inversely related. The statistical treatment is in terms of deci-log hoarding scores which permit the relation between hoarding and temperatures to be described by the equation: $\log H = 18.5 - 0.42 T$. An interpretation and further problems are suggested.—K. F. Muenzinger.

1830. McFarland, Ross A., & Channell, Ralph C. A revised serial reaction time apparatus for use in appraising flying aptitude. (CAA Div. Res. Rep. No. 34, 1944; Publ. Bd. No. 50309.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 36. \$1.00, microfilm; \$3.00, photostat.—This report describes an instrument found to be of value in differentiating between good and poor pilot trainees. It presents a description of the original Mashburn apparatus, in which controls simulating those found in an airplane were manipulated by the trainee, and in which serial reaction of hands and feet was demanded in the testing procedure. A modified form of this instrument, which took the form of simplifying and rebuilding the original model with standard equipment obtainable from commercial manufacturers, is also described. The report includes results obtained on large groups of pilots during various stages of flying. Appendices present the following: (A) electrical interconnections—stimulus patterns of red lights; (B) directions for giving the serial reaction time test; and (C) lists of special parts and names of manufacturers.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1831. Matthews, B. H. C. Human ecology in relation to the physico-chemical factors. *Nature, Lond.*, 1946, 158, 255-257.—This review of a symposium includes the topics: the optimal conditions of climate for human comfort, the physiology of men working in very hot environments, limiting conditions for psychological efficiency, reaction to low and high oxygen pressures, and similarities in human reaction to large changes in normal environment.—A. C. Hoffman.

1832. Nance, Roy Dale, & others. The effect of distraction lights upon performance on the Mashburn serial coordination test. (CAA Div. Res. Rep. No. 29, 1944; Publ. Bd. No. 50307.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 31. \$1.00, microfilm; \$3.00, photostat.—This report presents an analysis of performance on the Mashburn serial reaction time apparatus with and without distraction lights, supplemented by: (1) a study of the effect of lengthening the time limits on the reliability of the test, and (2) an evaluation of the effects of fatigue upon test performance. These studies, involving a small number of cases, are exploratory in character. Appendix "A" presents description and schematic diagram of Mashburn counter circuit; "B" directions to the subject, Mashburn tests, Nance, 1943, (instructions for 8-min. and 24-min. tests); "C" mimeographed questions used with the long test; and "D" mean scores for successive minutes of work on the short and long tests.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1833. Scow, R. O. The retarding effect of allyl thiourea and of partial thyroidectomy at birth upon learning in the rat. *J. comp. Psychol.*, 1946, 39, 359-370.—These experiments were planned to study the effects upon learning in rats of hypothyroidism produced by two methods, one by the injection of allyl thiourea and the other by thyroidectomy. All

animals, including the controls, learned a water maze with 10 choice points, at each of which the rats had to discriminate between two doors that were marked with horizontal and vertical stripes respectively. Both groups, the injected and the thyroidectomized, made more errors than the normal animals, but did not take more time.—*K. F. Muenzinger.*

1834. Somerville, Walter. The effect of benzedrine on mental or physical fatigue in soldiers. *Canad. med. Ass. J.*, 1946, 55, 470-476.—Soldiers engaged in physically fatiguing activities and officers engaged in battle problems did not show superior performance when given varying doses (15 to 40 mgm.) of benzedrine. No evidence was yielded in any of the experiments that benzedrine tended to prevent sleep. Nothing from these experiments permits a recommendation of benzedrine for prevention of mental and physical fatigue in soldiers.—*F. C. Sumner.*

1835. Spence, Kenneth W., & others. The effect of massing and distribution of practice on rotary pursuit test scores. (CAA Div. Res. Rep. No. 44, 1945; Publ. Bd. No. 50316.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 37. \$1.00, microfilm; \$3.00, photostat.—Determination of the optimal administrative procedures for the School of Aviation Medicine Rotary Pursuit Test was undertaken as part of a research program on psychomotor tests for selection purposes in aviation. Data obtained on this test were analyzed to answer the following specific questions: (1) the effects of various combinations of length of work period and rest period on the level performance, (2) the reliability of scores, (3) the intercorrelations among learning segments, and (4) the nature of the learning curve in the test situation. Appendix A presents a sample data sheet; appendix B consists of tables showing mean time and mean per cent of time on target (minutes) and cumulative amount of practice for groups A, B, C, D, of army men, civilian men, and women; and appendix C gives tables showing intercorrelations between various trial segments, total score, and gain for groups A, B, C, D, of army men and civilian men.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1836. Spence, Kenneth W., & others. The effect of massing and distribution of practice on two-hand coordination test scores. (CAA Div. Res. Rep. No. 45, 1945; Publ. Bd. No. 50317.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 22. \$1.00, microfilm; \$2.00 photostat.—This study was concerned with the effects of various proportions of practice and rest on the level of test performance, the nature of the learning curve, the reliability of various types of scores, and the intercorrelations between learning segment scores, gain scores, and total scores. Appendix A presents a sample data sheet, and appendix B directions for the administration of the School of Aviation Medicine two-hand coordination test.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce).

1837. Sperry, R. W. Ontogenetic development and maintenance of compensatory eye movements in complete absence of the optic nerve. *J. comp. Psychol.*, 1946, 39, 321-330.—“The compensatory ocular reflexes which serve to maintain a steady view of the visual field in the presence of disturbing movements of head and body were found to develop in normal manner in frog tadpoles the eyes of which had been transplanted to the contralateral orbit in prefunctional stages and had never developed an optic nerve connection with the brain. It is concluded that the reflex associations of the vestibulo-ocular system in these animals are not patterned by training but are laid down directly in growth in a predetermined manner.” 38 references.—*K. F. Muenzinger.*

1838. Spiegel, E. A. Effect of labyrinthine reflexes on the vegetative nervous system. *Arch. Otolaryng.*, Chicago, 1946, 44, 61-72.—The effects of the vestibular system on vasomotor reactions, cardiac responses, gastrointestinal activity, and respiration are reviewed.—*A. C. Hoffman.*

1839. Thorpe, W. H., & Wilkinson, D. H. Ising's theory of bird orientation. *Nature, Lond.*, 1946, 158, 903-904.—Ising suggested that the sensory basis of direction-finding in the migratory and homing behavior of birds might be due to stimulation of the vestibular mechanisms by a Coriolis force generated by the rotation of the earth. Observations on liquid in a ring-shaped tube show that the Coriolis force produces a streaming movement in the fluid and a couple acting on the ring. The present authors, however, question whether the magnitude of the forces involved is sufficient to compete adequately with the Brownian agitation energy of the sensitive hairs of the avian vestibular apparatus or with the effects due to motion of the head. Also, according to the theory birds with larger semicircular canals (either absolutely or relative to body size) should be more efficient in migratory or homing flights; but a review of available evidence suggests that this is not necessarily the case.—*A. C. Hoffman.*

1840. Unna, P. J. H. Limits of effective human power. *Nature, Lond.*, 1946, 158, 560-561.—By plotting the available evidence on record speeds (expressed as horse-power output) against duration of the work during up-hill races, the author presents a curve which “could be taken as indicating the highest output of which human beings are capable.”—*A. C. Hoffman.*

1841. Wanscher, J. H. The hereditary background of handwriting; an investigation of the handwriting of mono- and dizygotic twins. *Acta psychiat. Kbn.*, 1943, 18, 349-375.—Specimens of the handwriting of 60 pairs of adult twins were classified into 5 categories, according to degree of resemblance. The 29 pairs of monozygotic twins showed a distribution markedly skewed in the direction of resemblance. The 31 pairs of dizygotic twins showed a distribution moderately skewed in the direction of resemblance. A random pairing of the specimens

showed an unskewed distribution. 20 references.—*A. L. Benton.*

1842. Wragge Morley, D. Division of labour in ants. *Nature, Lond.*, 1946, 158, 913-914.—"The mechanism of the division of labour depends on the reaction of the individual ant . . . when one ant responds to a stimulus, the other ants in close proximity to it are stimulated to similar reaction unless they are already reacting to a stronger stimulus, or their response to that particular stimulus is already fully satisfied."—*A. C. Hoffman.*

[See also abstracts 1746, 1752, 1786, 1814, 1859, 1882, 1931, 2046.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

1843. Abou Zeid, A. La psychanalyse des mythes. (Psychoanalysis of myths.) *Egypt. J. Psychol.*, 1946, 2, 233-251.—The close analogy which exists between certain Egyptian, Greek, and Babylonian myths is indicated. Most of these myths which have gods for heroes describe behavior which is incredible. The various explanations of these myths which have been offered are felt to be incomplete, superficial, or fantastic. As myths are a product of the human mind, the complete explanation should be found in an analysis of the human mind. The similarity of the well-known myths to the dreams Freud describes as typical is noted, and it is felt that myths are one type of disguised satisfaction of suppressed desires. In addition to the Oedipus complex used by the psychoanalysts, the author suggests the Seth complex from the Egyptian myth of Osiris, which is felt to offer additional explanation of relations within the family complex.—*G. S. Speer.*

1844. Flugel, J. C. Men and their motives; psycho-analytical studies. New York: International Universities Press, 1947. Pp. 289. \$5.00.—This is a reprint of the English edition of 1934. (See 9: 3065.)

1845. Fodor, Nandor. The search for the beloved. *Psychiat. Quart.*, 1946, 20, 549-602.—Psychoanalytic discussion of natal and prenatal traumata.—*A. L. Benton.*

1846. Freud, Anna. The psycho-analytical treatment of children. London: Imago Publishing Co., 1946. Pp. xii + 98. 10s. 6d.—Four lectures and two essays on the theoretical and technological problems involved in the psychoanalytical treatment of children have been translated and compiled into one volume. Part I deals with the technique of child analysis, the methods used, the role of transference, and the applications of findings from the analytical treatment of children to problems of child rearing. Part II is a theoretical treatment of the special problems of children's analysis, especially as it differs from adult analysis. Part III is concerned with the clinical indications for analysis as the method of choice. Case material from the author's own clinical records is extensively used to illustrate the discussion. The bibliography is limited to clinical and theoretical references on child psychoanalysis. (See also 2: 121, 3485.)—*M. E. Wright.*

1847. Soueif, Mostafa I. La psychanalyse et l'artiste. (Psychoanalysis and the artist.) *Egypt. J. Psychol.*, 1946, 2, 282-302.—The theories of Freud, Hanns Sachs, and Jung in the explanation of the artist are presented. The author criticizes these theories as exaggerating the importance of unconscious processes and minimizing voluntary acts. It is felt that Freud and Jung studied the artist casually and only after their theories had been well systematized.—*G. S. Speer.*

[See also abstracts 1874, 1964.]

FUNCTIONAL DISORDERS

1848. Boland, Ruth F. High school pupils with I.Q.'s below 75. *Understanding the Child*, 1947, 16, 11-15.—"Whether or not we approve of the graduation of the mentally deficient pupil from elementary school, and of his subsequent entrance into high school, it should be recognized that he is passing, that he is gaining entrance into high school, and that he is even graduating from there. This fact may be a departure from theory but it is not a departure from practice. The high school must face the fact of the presence of the mentally deficient pupil. . . . A curriculum even lower than that which many high schools have adapted for slow learners should be adjusted to this group."—*S. B. Sarason.*

1849. Cameron, D. Ewen. (Royal Victoria Hospital, Montreal, Que.) Frontiers of social psychiatry. *Psychiat. Quart.*, 1946, 20, 638-655.—The cultural factors determining the incidence and the particular forms of mental disorders are discussed. Characteristic differences in the prevalence of certain symptomatic pictures at two psychiatric centers with which the author has been connected are described and related to differences in social factors.—*A. L. Benton.*

1850. Crane, Harry W. (U. North Carolina, Chapel Hill, N. C.) The environmental factor in sexual inversion. *J. Elisha Mitchell sci. Soc.*, 1945, 61, 243-248 (also in Coker, W. C., *Studies in science*. Chapel Hill: University of North Carolina Press, 1946).—Havelock Ellis is criticized because he did not sufficiently recognize the importance of the environmental factor in sexual inversion, but emphasized an hereditary basis for inverted behavior. A case history is used to present a constellation of environmental factors to support the thesis that there is an environmental predisposition together with an innate predisposition to such inversion.—*J. J. Kane.*

1851. Curran, Desmond, & Guttman, Eric. (St. George's Hospital, London.) Psychological medicine; a short introduction to psychiatry with an appendix on psychiatry associated with war conditions. (2nd ed.) Baltimore: Williams & Wilkins, 1945. Pp. viii + 246. \$3.50.—Revision of an elementary text (see 18: 732). The main alterations consist in more extended discussions of constitutional factors and psychopathic personalities and a new chapter on obsessional states.—*A. L. Benton.*

1852. Fouquet, Pierre D. *Psychiatry in France*. *Bull. Menninger Clin.*, 1946, 10, 173-179.—The Director of the Mental Prophylaxis Service of the Department of Seine presents a brief historical review of French psychiatry as preliminary to a survey of the present situation of psychiatry in France. In continental France there are 350 psychiatrists for a population of 40,000,000. There are 97 psychiatric hospitals, which seldom have more than 2,000 beds and are organized in small treatment units. There are also familial colonies—whole villages in which the patients mix with the normal population and work under psychiatric supervision. "There is no specialization in French psychiatric hospitals, no hierarchy between the medical directors, no fragmentation or dispersion in the relation between the patient and his physician."—W. A. Varvel.

1853. Galdston, Iago. On the etiology of depersonalization. *J. nerv. ment. Dis.*, 1947, 105, 25-39.—Varying theories on the etiology of depersonalization are summarized. Depersonalization is defined as a change, of which the patient is aware, of the strength and intactness of the patient's ego functions, as a sort of benign form of schizophrenia in which the patient remains in good contact with reality. The ego fails to function properly because of the relative strength of the patient's id impulses and the relative lack of development, due to lack of training, of their super-egos. 30-item bibliography.—L. B. Heathers.

1854. Kozol, Harry L. Pretraumatic personality and psychiatric sequelae of head injury: II. Correlation of multiple, specific factors in the pretraumatic personality and psychiatric reaction to head injury, based on analysis of one hundred and one cases. *Arch. Neurol. Psychiat.*, Chicago, 1946, 56, 245-275.—A study of the pretraumatic and posttraumatic personality of 101 subjects with acute head injuries was made for the purpose of investigating relationships between specific factors in the personality before head injury and the psychiatric sequelae. Pretraumatic personality classifications were made on the basis of historical-biographic method of personality study. Time of onset and duration of posttraumatic symptoms were studied. The psychiatric sequelae could not be ascribed to any one cause, but rather were the resultant of various factors; the severity of brain injury was not highly correlated with the severity of the sequelae; the severity and persistence of the sequelae were found to be highly related to complicating psychosocial factors. "Patients with pretraumatic psychoneurotic personalities showed a greater proportion of post-traumatic psychiatric symptoms than did patients in other groups." (See also 21: 1525.)—K. S. Wagoner.

1855. Lundquist, Ring. Über die Anosognosie. (On anosognosia.) *Acta psychiat.*, Kbh., 1943, 18, 245-255.—Report of a case and discussion of the problem.—A. L. Benton.

1856. Maeder, Le Roy M. A. Adult maladjustments traceable to childhood experiences. *Philad. Med.*, 1946, 42, 551-555.—Causes of adult maladjustment other than mental deficiency and psychosis are generally traceable to a childhood environment, familial or extrafamilial, which wittingly or unwittingly fostered a retardation of the child's emotional development. Earmarks of emotional immaturity in the adult are: infantile egocentrism, impulsiveness, dependency, lack of emotional control, and subjective mindedness.—F. C. Sumner.

1857. Moore, Merrill. War and nerves. *Bull. New Engl. med. Cent.*, 1946, 8, 184-191.—On the basis of his observations during 4 years of military psychiatric experience, the author comments on the paucity of psychological breakdown, the psychological history of patients, and the characteristics of the complaints made.—A. C. Hoffman.

1858. Roheim, Geza. Masturbation fantasies. *Psychiat. Quart.*, 1946, 20, 656-673.—Detailed description of the masturbation fantasies of a patient undergoing psychoanalysis. 19 references.—A. L. Benton.

1859. Sokoloff, Boris. Jealousy; a psychiatric study. New York: Howell, Soskin, 1947. Pp. 262. \$2.50.—This book is addressed primarily to those who are victims or sufferers of jealousy. Two of the 6 chapters contained in the book are devoted to a discussion of the nature of jealousy and the method of its treatment. The remaining chapters are illustrative case histories with appended notes. Jealousy reactions are classified into 4 groups: (1) intellectual jealousy; (2) exaggerated possessiveness in the absence of sexual passion; (3) sexual passion; and (4) jealousy in relation to true love. Jealousy is a maladjustive pattern which may be referred to childhood but is also "atavistic" and physiologically grounded. Treatment is by patient understanding or sensible handling on the part of the spouse or object of jealousy. When jealousy approaches a complex or obsession, divorce or psychiatric or psychoanalytic treatment may be necessary.—A. Burton.

1860. Yahuda, J. (16a, Abercorn Place, N. W. 8, London.) Sexual deviations. *Med. Pr.*, 1946, 216, 345-347.—This is a letter to the Editor of *The Medical Press* in criticism of A. Stoller's article entitled Sexual Deviations in the Male (see 21: 1466). Stoller's exposition is thought to be based more upon psychoanalytic premises than upon biological facts. Even his conception of the nature of sexuality appears pseudoscientific and in small degree consonant with physiological operations.—F. C. Sumner.

CLINICAL NEUROLOGY

1861. Bambarén, Carlos A. Síndrome subjetivo de los traumatizados del cráneo. (The subjective syndrome of head injuries.) *Arch. Med. leg.*, B. Aires, 1946, 16, 325-340.—A case is reported of a man who suffered an industrial accident which produced cerebral concussion, loss of consciousness,

and neuropsychiatric troubles for 8 months. He actually presented the "syndrome subjectif des traumatisés du crâne" first described by Pierre Marie in 1916. French summary.—R. J. Corsini.

1862. Gordon, Alfred. Cataplexy (diagnostic elements, interpretation and management). *Dis. nerv. Syst.*, 1947, 8, 11-14.—Eight cataplexic patients were observed for a period that included early childhood, adolescence, and adulthood; their brief case histories are presented. Cataplexy is regarded as a special type of epileptic attack (with sudden inhibition rather than excitation of cortical motor areas); the new term "cerebral dysrhythmia" should be applied to this whole syndrome. Early diagnosis and treatment are important, for none of these 8 patients showed signs of mental deterioration.—C. E. Henry.

1863. Gottlieb, Jacques S., Ashby, M. Coulson, & Knott, John R. (Iowa City, Ia.) Primary behavior disorders and psychopathic personality; correlations of the electroencephalogram with family history and antecedent illness or injury. *Arch. Neurol. Psychiat.*, Chicago, 1946, 56, 381-400.—The electroencephalograms of 100 patients with primary behavior disorders and 100 patients with psychopathic personality showed higher percentages of abnormal electroencephalograms than normal adults. When there was a family history either of epilepsy, maladjusted personality or personal history of convulsions, or head injury with unconsciousness or severe illness, a greater proportion of abnormal electroencephalograms were found.—K. S. Wagoner.

PSYCHOSES

1864. Bellak, Leopold, & Parcell, Blanche. (St. Elizabeth's Hospital, Washington, D. C.) The prepsychotic personality in dementia praecox; study of 100 cases in the Navy. *Psychiat. Quart.*, 1946, 20, 627-637.—The social histories of 100 consecutive admissions with the diagnosis of dementia praecox were studied with special reference to the relative prevalence of introvert or extrovert traits. Of the group, only 28% were judged to have had prepsychotic personalities characterized by introversion; 35% were judged to have had extroverted prepsychotic personalities; and 37% showed a mixture of both trends. Thus, doubt is cast upon the conventional conception that most schizophrenics have introverted prepsychotic personalities.—A. L. Benton.

1865. Bellak, Leopold, & Willson, Elizabeth. (St. Elizabeth's Hospital, Washington, D. C.) On the etiology of dementia praecox; a partial review of the literature, 1935 to 1945, and an attempt at conceptualization. *J. nerv. ment. Dis.*, 1947, 105, 1-24.—Investigations during the past 10 years on the etiology of dementia praecox are reviewed, the review covering possible anatomical, biochemical, endocrine, hereditary, infectious, physiological, and psychological factors. It is suggested that schizophrenia is a deficit reaction associated with a large variety of etiological factors, these factors varying

from completely organic to completely psychogenic ones. The organic factors which at this time appear most important are those associated with brain metabolism. Schizophrenia probably occurs only when certain predispositions, whether organic or not, and certain precipitating causes, whether psychological or organic, are both present. 96-item bibliography.—L. B. Heathers.

1866. Brecher, Sylvia. (New York State Psychiatric Institute, New York.) The value of diagnostic signs for schizophrenia on the Wechsler-Bellevue adult intelligence test. *Psychiat. Quart. Suppl.*, 1946, 20, 58-64.—The Wechsler-Bellevue is particularly well-adapted for interpreting the subject's total intellectual performance. The subtests, in addition, are weighted so that the results of any one test can be compared directly with the results of all the other tests. A large number of attempts have been made to isolate definite "diagnostic signs" of schizophrenia from test scores on the Wechsler-Bellevue. The author reports the results of an analysis of scores made by 40 patients at the Clarinda State Hospital, Clarinda, Iowa, according to Wechsler's method of isolating "diagnostic signs." The results seem to indicate that Wechsler's diagnostic signs are no more significant for one type of schizophrenia than for another. For these 40 cases correct diagnosis would have been made by the Wechsler-Bellevue test in only 32.5% of the cases and incorrect diagnosis in 67.5%. Since there are 5 diagnoses possible, correct diagnosis should have been made 20% of the time by chance alone. The author further compares the performance of two schizophrenic patients, both of whom have the same IQ, are of the same age, are both of the simple type, yet reveal different "diagnostic signs."—W. E. Artus.

1867. Diaz-Guerrero, Rogelio, Gottlieb, Jacques S., & Knott, John R. The sleep of patients with manic-depressive psychosis, depressive type; an electroencephalographic study. *Psychosom. Med.*, 1946, 8, 399-404.—Electroencephalographic data obtained during sleep and waking hours from normal subjects and 6 manic-depressive patients, depressive type, and analyzed according to the categories: waking, low voltage, spindles, spindles plus random, and random, showed that the disturbed sleep of the patients was characterized by (1) difficulty in falling asleep, (2) early or frequent awakenings, (3) an unusually greater proportion of light sleep, and (4) more frequent oscillations from one level of sleep to another than normally occurs.—P. S. de Q. Cabot.

1868. Faurbye, Arild, & Larsen, J. Finn. (St. Hans Hospital II, Roskilde, Denmark.) The circulation of the blood in schizophrenics (estimated by means of "the blood pressure method" of Liljestrand & Zander). *Acta psychiat.*, Kbh., 1945, 20, 159-166.—Using this method to assess the circulation of the blood, no differences were found between a group of 82 schizophrenic patients and a group of 24 nonschizophrenic patients.—A. L. Benton.

1869. Moriarty, John D. (1052 W. 6th St., Los Angeles, Calif.) A survey of 5,000 psychotic patients

(evacuated to a U. S. naval hospital from the Pacific; and a rehabilitation program). *Dis. nerv. Syst.*, 1947, 8, 27-29.—"A survey of 5,000 patients reveals that military psychoses bear many close similarities to those of civilian life but that there are some noteworthy differences, especially in the precipitating factors peculiar to operational conditions. The removal of these etiologic influences by evacuation to the United States accounts for the favorable prognosis in over two-thirds of the patients. Thus 40 per cent were "socially recovered" on arrival and another 30 per cent were in varying stages of convalescence. In these groups superficial psychotherapy and vocational reorientation usually suffice to bridge the transition to civilian life. On the other hand, a sizeable number of patients require special treatment lest their psychotic reactions progress into a chronic state. In these cases an adequate course of electroshock therapy, sometimes combined with insulin sub-coma treatment, is strongly indicated. It would appear that in general the outlook for the future is considerably better than in the psychoses encountered in civilian life."—C. E. Henry.

1870. Newell, Nancy L. Mental health and ill health among youth. *Understanding the Child*, 1947, 16, 3-6.—This is a summary of a study of the factors that lie behind mental ill health in young people. Fifty-six cases of boys and girls under 19 years of age were studied. They were all from state mental hospitals. This group was compared to a control group matched as to age and sex. "The most striking difference in the experience of these two groups was the appalling insecurity of the lives of many of the psychotics." Parental and early personality factors are related to the development of the psychosis. Preventive measures are discussed.—S. B. Sarason.

1871. Ødegaard, Ørnulf. The distribution of mental diseases in Norway; a contribution to the ecology of mental disorder. *Acta psychiat., Kbh.*, 1945, 20, 247-284.—A statistical investigation of all first admissions to Norwegian psychiatric hospitals during the period 1926-1935 suggest the following conclusions: (1) urbanization or social isolation do not seem to influence the incidence of mental disease; (2) the rate is lower for the migrant element of the population than for those who still reside in the community of their birth; (3) it seems unlikely that environmental factors of an economic nature are of importance; (4) variations in the racial stock of the population appear to be of significance in determining the relative incidence of mental disease.—A. L. Benton.

1872. Sillman, Leonard R. The dynamics of schizophrenia. *J. nerv. ment. Dis.*, 1947, 105, 61-72.—The various categories of schizophrenia are analyzed in terms of their deviations from normal mentation. In paranoids, intelligence is not subordinated to perception, i.e., thoughts are not checked against reality; in hebephrenics, ideas and their motor expression become confused because ideation is not controlled by intelligence; in catatonics, motor

responses are not regulated by either ideation or intelligence so that the motor expression of impulses is either excessively released or inhibited. Shock therapies are somewhat effective with schizophrenics because they force some reintegration of ideation and motility. It is suggested that pharmacological research is needed to discover reagents capable of forcing other types of reintegration.—L. B. Heathers.

PSYCHONEUROSES

1873. Bergler, Edmund. (251 Central Park West, New York.) Elderly neurotics. *Dis. nerv. Syst.*, 1947, 8, 35-36.—"Neurosis being a progressive disease, the old repressed infantile wishes ask for more substantial satisfaction, the inner conscience reclaims more punishment. Different techniques are described, showing how the inner conscience lures the aging Ego into more dangerous escapades. The natural solution is in the end an independently arising organic disease which saturates the neurotic wish for punishment. From the cradle to the grave, the neurotic is an insatiable glutton for punishment."—C. E. Henry.

1874. Bergler, Edmund. Five aims of the psychoanalytic patient. *Psychiat. Quart.*, 1946, 20, 684-700.—The 5 aims described are: (1) destruction of the neurosis; (2) living out of repressed wishes; (3) improvement (rather than destruction) of the neurosis; (4) strengthening of unconscious defense mechanism; (5) maintenance of the neurosis. These aims are illustrated by examples from the author's psychoanalytic practice.—A. L. Benton.

1875. Burt, Cyril. The assessment of personality. *Egypt. J. Psychol.*, 1946, 2, 1-21.—Factor analysis is described simply and presented as a statistical method of identifying common factors which enable the prediction of behavior of the individual in as many situations as possible. The study of the factor analysis of the symptoms of 216 child and 143 adult alleged neurotic patients is presented in some detail. It is concluded that among children neuroses are much more rare than is commonly supposed; what are usually diagnosed as neuroses are for the most part nonpathological deviations. These cases are suffering from deviations in personality and are far more effectively treated by the psychologist than the psychiatrist.—G. S. Speer.

1876. Himmelweit, H. T. A comparative study of the level of aspiration of normal and neurotic persons. *Brit. J. Psychol.*, 1947, 37, 11-59.—From level of aspiration tests were obtained estimates of future performance, estimates of past performance, responsiveness in the setting of goals to level of performance, and percentage of typical reactions to success and failure. Both normals and neurotics overestimated future and underestimated past performance. Neurotics, especially women, showed a greater tendency than normals to overestimate future performance, but a smaller tendency to underestimate past performance. The neurotics showed a bi-modal distribution of scores, since hysterics showed a more "realistic" objective goal-

setting behavior than normals; whereas dysthymics showed wide deviations in their estimates of past and future performance from real performance. Increased motivation produced increased ego-involvement and accentuated the characteristic response patterns of the two types of neurotic. 25 references.—*M. D. Vernon.*

1877. Kardiner, Abram (*Columbia U., New York*), & Spiegel, Herbert. *War stress and neurotic illness.* (2nd ed., rev.) New York: P. B. Hoeber, 1947. Pp. xiii + 428. \$4.50.—The present volume is a second edition, completely rewritten, of the senior author's *The Traumatic Neuroses of War* (see 15: 3434). Experience with World War II cases was collaborated upon to deal with the acute phases of traumatic neurosis. The basic principles of the psychopathology and the therapy have not been changed, however. "The entire plan of the book is . . . based on the assumption that a neurosis is a process which must be observed during various stages of organization." The authors deal with the general problems of battlefield psychiatry, the acute phase of neuroses, and the treatment of the acute phase; describe symptomatology and analysis of the chronic phases; make extended theoretical formulation; and discuss treatment and forensic issues. Forty acute and chronic case descriptions are included. 112-item bibliography.—*D. T. Herman.*

1878. Menninger, William C. *Modern concepts of war neuroses.* *Bull. Menninger Clin.*, 1946, 10, 196-209.—The war has focused attention upon neurotic illness. While in general the same clinical pictures occur in military as in civilian life, combat exhaustion "does not on its early symptomatology fit into any of our known diagnostic categories." This diagnostic label "represents a transient psychiatric reaction to combat, that may or may not progress to a more clearly defined clinical entity." The author briefly presents a background for understanding combat exhaustion and surveys the new environmental stresses in becoming a soldier and the psychological changes required to meet these external changes. "The psychodynamics of combat exhaustion include four significant features: the depleted ego strength, the specific precipitating trauma, the mobilized aggression and the loss of ego supports in the form of leadership and group identification."—*W. A. Varvel.*

1879. Siegel, Paul S., & Lacey, Oliver L. A further observation of electrically-induced "audigenic" seizures in the rat. *J. comp. Psychol.*, 1946, 39, 319-320.—A report on electrically induced convulsions in 2 rats. The similarity between the observed behavior patterns "and those typically induced by auditory stimulation is so marked as to suggest identity."—*K. F. Muenzinger.*

PSYCHOSOMATICS

1880. Booth, Gotthard. Organ function and form perception; use of the Rorschach method with cases of chronic arthritis, Parkinsonism and arterial

hypertension. *Psychosom. Med.*, 1946, 8, 267-385.—A comparison of the Rorschach records of two groups, one (V) including 60 patients with arterial hypertension characterized by increased tension in the vascular system, the other (L) consisting of 60 patients, 30 of whom had arthritis and 30, Parkinsonism, both subgroups showing increased tension in the locomotor system. L and V types of Rorschach responses suggested that the L type of patient is dominated by an urge for individualistic independent action with aggression provoked by obstacles. Hypertensive patients (V) are dependent in their relationships through identification with the social environment and with action determined by material needs and social standards. The authors conclude that the "form and functioning of the body in health as well as disease, persistently express the basic personality structure." 50-item bibliography.—*P. S. de Q. Cabot.*

1881. Cathcart, J. P. S. The role of the emotions in the production of gastro-intestinal disturbances. *Canad. med. Ass. J.*, 1946, 55, 465-470.—Emotional influences, particularly those involved in deep-seated conflicts, have very definite effect upon the gastro-intestinal tract, even to the extent of producing pathological changes such as peptic ulcer and special forms of diarrhoea and constipation. A close kinship exists between anxiety neurosis and peptic ulcer and between peptic ulcer and so-called "gastric neurosis." Psychotherapeutic methods have equally efficacious results both for anxiety neurosis and peptic ulcer. It is necessary to attach great importance to personal and hereditary antecedents of the patient as well as to the detailed history of his fears, hostilities, and frustrations.—*F. C. Sumner.*

1882. Floyer, Michael, & Jennings, Denys. Fractional test-meals on students awaiting examination results. *Lancet*, 1946, 251, 356-357.—Fasting secretions (subjects either went without lunch or had an early light meal) drawn at 20-minute intervals from the stomachs of 20 medical students during the hour before and after the late afternoon announcement of the results of an examination gave no evidence of hypersecretion or significant departure from expectation despite the tense and anxious (16 passed and 4 of the group failed the examination) atmosphere of the room in which all the students waited. This study is related to a discussion of emotional factors in stomachic disorders.—*A. C. Hoffman.*

1883. Hibbeler, Helen L. Personality patterns of white adults with primary glaucoma. *Amer. J. Ophthal.*, 1947, 30, 181-186.—More frequent disturbances of personality as revealed by the Minnesota Multiphasic Personality Inventory were found in patients having primary glaucoma than in unselected clinic patients.—*D. J. Shaad.*

1884. Lindemann, Erich. Psychotherapeutic opportunities for the general practitioner. *Bull. New Engl. med. Cent.*, 1946, 8, 248-254.—Psychosomatic effects are discussed to emphasize that, "Individuals need about them persons with whom to interact.

It they are able to find the human environment appropriate to their special needs, they are likely to live without building up emotional tension."—A. C. Hoffman.

1885. Moloney, James Clark. (*Haven Sanitarium, Rochester, Mich.*) The analyst remains silent. *Dis. nerv. Syst.*, 1947, 8, 14-16.—Just as threats and stresses in the environment cause the patient to react with fear and tension and aggression, the abuse suffered by the analyst from the analysts and the ridicule received from the general public cause the analyst to "bristle with fury." Since he is committed to a program of silence and passivity, such "fierce tensions" have no active outlet, and cardiovascular disorders thereby become a real occupational hazard. The necessity of exercise, games, and hobbies to the health of the analyst is stressed.—C. E. Henry.

1886. Moses, Leon. Psychodynamic and electroencephalographic factors in duodenal ulcer. *Psychosom. Med.*, 1946, 8, 405-409.—Results of a psychodynamic and encephalographic study of 25 randomly selected male ulcerous naval patients indicated (1) an incidence of dominant alpha activity and (2) a consistent ulcer personality constellation characterized by marked feelings of insecurity with strong passive dependent trends. "The alpha rhythm is best considered as a concomitant electrocortical activity of the tendency of the individual to assume a passive, tensionless, unstimulated state."—P. S. de Q. Cabot.

1887. Redlich, Frederick C., Moore Burness E., & Kimbell, Isham, Jr. Lumbar puncture reactions: relative importance of physiological and psychological factors. *Psychosom. Med.*, 1946, 8, 386-398.—To determine the relationship between postlumbar puncture symptoms and size of needle used, patients' personality traits and the psychological impact of the procedure, alternate psychiatric patients among 42 men and 58 women ranging in age from 16 to 64 years were punctured routinely with No. 16 and No. 22 gauge needles. No significant relationship was found between the occurrence of symptoms and either intelligence or emotional stability. Suggestion appeared to be the primary important psychological factor in producing symptoms. Drainage was the most significant factor outweighing anxiety, hypochondriasis, and other emotional characteristics. 33 references.—P. S. de Q. Cabot.

1888. Ruesch, Jurgen, Harris, Robert E., Christiansen, Carole, Heller, Susanne H., Loeb, Martin B., Dewees, Sally, & Jacobson, Annemarie. Chronic disease and psychological invalidism; a psychosomatic study. *Psychosom. Med. Monogr.*, 1946, No. 9. Pp. 191.—An investigation of delayed recovery among 123 patients in an extensive outpatient study included as data a complete medical history, a diagnostic psychiatric interview, social mobility, cultural factors, and psychological tests with intensive individual and group psychotherapy and a special emphasis upon character problems among 64 individuals in an intensive inpatient study.

The author discusses the identification of the cases, medical aspects, psychosomatic relationships, situational conflicts, character problems, social and cultural factors in delayed recovery, psychological problems in general medicine, and the selection and prognosis of cases for therapy and rehabilitation. An appendix summarizes the sociopsychological aspects of patients with chronic disease and psychological invalidism. The rehabilitation of cases with delayed recovery is influenced by social and cultural factors. Patients with delayed recovery have many persistent infantile conflicts. "Situational conflicts concurrent with disease may contribute toward prolonged convalescence." 55-item bibliography.—P. S. de Q. Cabot.

THERAPY AND REHABILITATION

1889. Abrahams, Joseph, & McCorkle, Lloyd W. Group psychotherapy at an Army rehabilitation center. *Dis. nerv. Syst.*, 1947, 8, 50-62.—This paper describes the philosophy and methodology of a group psychotherapy program dealing with 500-750 cases at an Army rehabilitation center. The psychopath, in a group setting, is apparently able to achieve a certain degree of transference, the mechanism of which is obscure, thereby benefiting from the therapy. The temporal course of treatment is outlined, together with specific examples of how the group sessions are conducted. Of these cases, 78% appear to have made a satisfactory adjustment for a 3-month period of further Army duty, while only 13% failed to adjust. These short-term results in "softening" the aggressive psychopath are so encouraging that the program is recommended to civil penocorrectional institutions.—C. E. Henry.

1890. Burr, Emily. (*Vocational Adjustment Bureau, New York.*) A five-year study of 112 women parolees of New York State hospitals. *Psychiat. Quart. Suppl.*, 1946, 20, 73-85.—An analysis of records kept over a period of 5 years of 112 women parolees from New York State hospitals has been prepared by the Vocational Adjustment Bureau. Ninety-four of the women were diagnosed as either neurotic or psychotic, with only 5 having a prognosis considered "fair." Only 85 had been employed before hospitalization, and of these only 10% returned after hospitalization to their previous employment. In analyzing the home environment of the 72 women on whom there was information, it was found that 41 persons could be placed categorically in the low income group, 28 in the average group, and 3 in the highest. The fact that siblings or a parent suffered from mental illness seriously affected the peace of mind of 16 out of the 112 girls, while 43 reported great anxiety lest they become mentally disturbed as were their relatives. Group therapy designed to allay these fears proved most efficacious. Twelve of the 112 girls had been married; two of these had been married twice. In none of these cases was a good marital relationship indicated. The girls were predominantly young in age: 72 of the women were between 15 and 26 years old.

Vocational training was found to be of value for all the girls, regardless of differences in educational background. Besides the workshop and unit training courses, special training in typing, filing, fashion-designing, and machine-operating was arranged for 27 of the 112 parolees. Some of the problems arising in the training of these girls are discussed in detail.—*W. E. Artus.*

1891. Frignito, Nicholas G. *Methods of treatment in psychiatry.* *Hahnemann. Mon.*, 1946, 81, 522-527.—This is a brief sketch of methods of treatment in twentieth-century psychiatry with special mention given to insulin shock, metrazol, and electroshock, of which the last mentioned is meeting with widest acceptance.—*F. C. Sumner.*

1892. Geoghegan, J. J. The "shock therapies" at the Ontario Hospital, London. *Canad. med. Ass. J.*, 1947, 56, 15-24.—Based on the observation of 469 patients treated by diverse shock therapies at the Ontario Hospital since 1944 the following conclusions are drawn: (1) shock therapy is an indispensable part of a well-organized psychiatric hospital; (2) the duration of certain illnesses is notably shortened by the shocks; (3) several mental states of long duration are clinically ameliorated by this therapy; (4) the danger of this mode of treatment is minimal and it is possible to apply it to cardio-renal cases if the cases are well chosen; (5) electroshock is the shock treatment of choice, insulin shock being reserved for patients resistant to electroshock or for certain psychoses where this therapy is more particularly indicated as, for example, schizophrenia; (6) psychotic reactions due to certain infections or intoxications benefit from shocks; (7) curare should only be utilized in rare cases as an adjuvant of shock therapy; and (8) study should be continued as to the value of shock treatment as a prophylactic for certain mental states.—*F. C. Sumner.*

1893. Knapp, Joseph L. (*Weston State Hospital, Weston, W. Va.*) *Psychotherapy in the treatment of tuberculous patients.* *W. Va. med. J.*, 1947, 43, 12-15.—Disclosure that one has tuberculosis brings with it terrific psychic shock and mental trauma. It means (a) that one must be separated from his family and friends for a long indefinite period; (b) that there will be prolonged delay and, in many cases, complete frustration of all the plans and hopes the patient had for the future; (c) that there is created the economic problem of the family's welfare and maintenance during the patient's hospitalization; and (d) that the patient is engulfed in the natural fear of complete permanent invalidism and possible death. The psychotherapy in treating tuberculous patients falls into 3 distinct phases: (1) prior to hospitalization; involving serious but encouraging enlightenment of the patient as to his condition, the nature of tuberculosis, the probable length of hospitalization, and the rendering of assistance in making necessary economic arrangements for his family; (2) during hospitalization; information on the disease, classes in academic work, vocational

retraining, assistance to a new life philosophy and cheerful, optimistic outlook, and group therapy; (3) after discharge; education of the public that recovered tuberculous patients are not propagators of the disease, contacting of the family prior to the patient's arrival, contacting of the former patient himself, assistance in his efforts at readjustment, and organization of groups of cured patients for meeting and mutually discussing their progress and problems.—*F. C. Sumner.*

1894. Kupper, William H. *Observations on the use of a phonograph record of battle sounds employed in conjunction with pentothal in the treatment of 14 cases of severe conversion hysteria caused by combat.* *J. nerv. ment. Dis.*, 1947, 105, 56-60.—A phonograph record of battle sounds accompanied pentothal treatments of 14 consecutive hysterical conversion cases at a general hospital in France. The record was used to facilitate the soldier's reliving of battle experiences in order to determine the extent to which the battle experience was related to the symptoms. Nine of the 14 patients gave up their symptoms when threatened with a return to "battle." Brief case histories are given.—*L. B. Heathers.*

1895. Licht, Sidney. *Music in medicine.* Boston: New England Conservatory of Music, 1946. Pp. xx + 132. \$3.00.—Convinced of the therapeutic value of music for mental and nervous illnesses, the author has collected historical references and inclusive research in this field, in this compilation of music therapy. Specific mention is made of the use of music in the field of psychiatry, as also in aiding digestion of food, in the field of physical education, in industry, as slumber or "rest" music, and as entertainment. The book includes the psychology involved in music therapy and lists the equipment required for a music therapy program in a hospital and the qualifications and training desired for a music therapist. 81-item bibliography.—*O. I. Jacobsen.*

1896. Mackie, Romaine Prior. *Crippled children in American education, 1939-1942.* *Teach. Coll. Contr. Educ.*, 1945 [i.e. 1946], No. 913. Pp. viii + 144.—The educational opportunities for crippled children in America during the last quarter century have made tremendous strides. Yet there is a wide gap between the psychological and medical knowledge of what to do and local practices. On the hypothesis that the general care and planning for the education of the crippled child would benefit by a knowledge of what was being done on the national scale, the author made a systematic survey of all types of institutions dealing with the crippled child. The major part of the study is devoted to a presentation of the facts on such factors as (1) special services offered by these schools, (2) medical examinations, (3) physiotherapy treatments, (4) curriculum organization, (5) educational and vocational guidance problems, and (6) the personality of the personnel directly involved in the program. Although some data are available on the crippled

child himself, they refer primarily to the nature of the disability rather than to an evaluation of the psychological problems of these children. The final chapter on "Implications" is a concise summary of the main findings in each of the special areas investigated, to be used as a guide to persons concerned with the planning and execution of programs for the crippled child. 49-item bibliography.—*B. A. Wright.*

1897. Meduna, L. J. (*Illinois Neuropsychiatric Institute, Chicago, Ill.*) **Pharmaco-dynamic treatment of psychoneuroses. (A preliminary report.)** *Dis. nerv. Syst.*, 1947, 8, 37-40.—From the hypothesis that the psychoses are disorders of cortical function and are therefore affected only by shock therapies producing cortical discharges, it was further postulated that the neuroses, conceived as disturbances of subcortical functions, might be affected by a therapeutic procedure directly involving such structures. Accordingly, 20% or 30% CO₂ (with O₂) inhalation was used in a mixed series of 38 patients; all psychotherapy was discontinued. From 20-40 respirations, repeated through 40-120 treatments, gave the following results: 6 psychotics, no improvement; 9 anastatic (obsessive-compulsive) neurotics, no improvement; 12 conversion neurotics, all improved; 11 cases of personality maladjustment, 8 improved. It is concluded that a wide range of functional behavior disorders, including addiction and war neurosis, is amenable to this treatment, which would be further improved by accompanying psychotherapy.—*C. E. Henry.*

1898. Naranick, Claudia Stewart. **The overactive patient.** *Amer. J. Nurs.*, 1947, 47, 97-102.—In not merely the manic patient but in almost any type of mental or emotional illness increased psychomotor activity may be found as an active or potential symptom. Not all mental hospitals provide adequate care for the overactive patient. Overactivity must either be diverted and directed into more acceptable and constructive channels or be relieved by sedative measures. Too often management of the overactive patient has taken the form of physical violence to the patient to the disrepute of many mental hospitals. Suggestions for proper management of the overactive patient are systematized and discussed under the following rubrics: (1) physical management; (2) indirect therapies (palliative, supportive, sublimative); and (3) direct therapies (suggestion, analysis, direction, and re-education). An overactive ward equipped with appropriate furnishings should be provided at a mental hospital.—*F. C. Sumner.*

1899. Noetzel, Elinor S. (*Syracuse Psychiat. Hosp., Syracuse, N. Y.*) **The selection of cases for social treatment.** *Psychiat. Quart. Suppl.*, 1946, 20, 50-57.—The task of the social worker is outlined as aiding the patient to regain satisfactions from his life. Furthermore, the social worker must decide whether the approach is to be from the point of view of attempting to improve the patient as he deals with his environment or of attempting to ease the environmental pressures upon the patient. The basis

of selection of patients must be: (1) consideration of the patient's need and of the question whether the agency can meet this need; (2) cases may also be selected which are of educational value to the staff or which would be of interest for research in case work techniques; and (3) cases may be selected in order to protect the community.—*W. E. Artus.*

1900. Shanahan, W. M., & Hornick, E. J. **Aversion treatment of alcoholism.** *Hawaii med. J.*, 1946, 6, 19-21.—A report on the aversion treatment of 24 patients at Queen's Hospital, Honolulu, using the Lemere and Voegtlin technique, is presented. There were 4 women and 2 Orientals among the patients; 17 (70%) have remained abstinent for over 9 months; 4 have relapsed but are much improved; 3 are unimproved. "Conditioned-reflex therapy is not a general panacea for alcoholism since the great majority of those afflicted fail to recognize the true nature of their disorder and decline definitive therapy."—(Courtesy of *Quart. J. Stud. Alcohol*).

1901. Van de Wall, Willem. **Music in Hospitals.** New York: Russell Sage Foundation, 1946. Pp. 86. \$1.00.—This is a descriptive survey of how music is used in the recreational and therapeutic programs of hospitals of all types. It is written for individuals, administrators, or musicians, who wish to know how to make their musical contribution more effective, by presenting the generalizations of those who have used the method. Chapter titles include: Music in Normal Living; Hospital Organization and Function; The Hospital Music Program; Integration of the Music Program into the Hospital Service; and The Hospital Musician. A variety of specific suggestions are included under each major heading.—*J. B. Rotter.*

1902. Zangwill, O. L. **Psychological aspects of rehabilitation in cases of brain injury.** *Brit. J. Psychol.*, 1947, 37, 60-69.—The psychologist can make a valuable contribution to the rehabilitation of brain injury cases by assessing the patients' residual disability. Their spontaneous compensation for loss of function can often be carried further by psychological guidance. Re-education can substitute new methods of response to replace those irreparably damaged, e.g. building up substitute methods of reading based on kinaesthetic and tactile patterns formed by tracing words. In some cases, e.g. of speech disorder, direct training by speech therapy is effective. As regards resettlement in ordinary life, not only the negative aspect of the patients' defects must be considered, but also the positive aspect of their other abilities and the occupations to which these are suited.—*M. D. Vernon.*

CLINICAL PSYCHOLOGY AND MENTAL HYGIENE

1903. [Anon.] **Conclusions concerning psychiatric training and clinics.** *Publ. Hlth Rep., Wash.*, 1946, 61, 943-957.—This is an outline of the problems discussed at the meeting of Consultants in Mental Hygiene, United States Public Health Service, in September, 1945. It contains an outline of the

standards which should be required for psychiatric training, both undergraduate and graduate, as well as standards for psychiatric hospitals. An estimate of the cost of personnel and facilities needed for proposed training are included. The second and third sections of the report are concerned with standards for psychiatric outpatient clinics and types of demonstration projects.—C. P. Froehlich.

1904. Beck, Bertram M., & Robbins, Lewis L. *Short-term therapy in an authoritative setting*. New York: Family Service Association of America, 1946. Pp. 112. \$1.25.—Experiences in the outpatient clinic of the Mental Hygiene Unit of Drew Field, Florida, during the 3-year period of 1942-1945 serve as a basis for the present monograph. It is primarily devoted to a description of the functions of the case worker in an Army setting and to the problem how his practices may carry over into civilian life. Methods of indirect treatment, via limited assignment and job placement, and direct short-term psychotherapy are discussed in detail. There is liberal case illustration of brief psychotherapy with simple adult maladjustment, traumatic neuroses, operational fatigue, and deep-seated neuroses. The role of the psychiatric social worker in the psychotherapeutic process is particularly stressed. General social implications of psychotherapy are noted.—A. Rabin.

1905. Bick, John W. (*ASF Regional Station Hospital, Fort Belvoir, Va.*) *Observations on current Army psychiatric problems; a comparison of out-patient records of January 1944 and January 1946*. *J. nerv. ment. Dis.*, 1947, 105, 73-76.—On the basis of the records of an Army psychiatric outpatient clinic, it appears that Army psychiatric clinics are now seeing fewer anxiety cases and more psychopaths, mental defectives, and chronically dissatisfied and resentful people than during the war period. Most of these patients would never have been admitted into the Army if preinduction screening procedures had included collecting data from community social agencies, courts, penal institutions, etc.—L. B. Heathers.

1906. Blain, Daniel. *Some essentials in national mental health planning*. *Bull. Menninger Clin.*, 1946, 10, 180-187.—The psychiatric problem of the Veterans Administration is similar to that of the nation itself; 3 out of 5 claims for disability pensions are neuropsychiatric in origin. In a recent survey, out of 2,600 men receiving pensions for psychiatric disorders, over 50% needed outpatient treatment and would have benefited from it. There are 50,000 patients in neuropsychiatric hospitals, and the peak load of 1975 will require 200,000 beds. The number of psychiatrists needed has been estimated up to 20,000, with a like number of clinical psychologists and twice as many psychiatric social workers. Major problems confront us: the nature and extent of mental disease and personality disorder, available community assets, the proper functions of professional groups, the value of the team concept, pre-

ventive psychiatry, and the relation of education to mental health.—W. A. Varvel.

1907. Brussel, James A. (*Willard State Hospital, Willard, N. Y.*) *Military neuropsychiatry—the next time*. *Psychiat. Quart.*, 1946, 20, 610-626.—The problems of the neuropsychiatrist in the Army during World War II are discussed. Specific topics covered are the Certificate of Disability Discharge, the status of neuropsychiatry in the Army, the problem of the psychopath, sexual problems, and the proper utilization of skilled neuropsychiatrists.—A. L. Benton.

1908. Davidoff, Eugene. (*Craig Colony, Sonyea, N. Y.*) *Future proposals with respect to the function of personnel consultation services*. *Dis. nerv. Syst.*, 1947, 8, 16-23.—Since a large peacetime army and universal draft appear inevitable, it is important to indicate the functions of the neuropsychiatrist and the personnel consultation service in order that maximum efficiency may be attained by each individual in the Army. The program outlined here recommends expanded induction center activity, an advisory psychiatric program, special training units for ineffectuals, and a special barracks clinic unit for treatment of small groups. A second echelon mental hygiene unit for individual treatment would follow the man through disciplinary, rehabilitation, or hospital assignment leading to discharge or return to duty.—C. E. Henry.

1909. Flamand, Ada López. *La Clinica de Conducta de las Caridades Católicas de New York*. (The Guidance Institute of the New York Catholic Charities.) *Bol. Inst. int. amer. Prot. Infanc.*, Montevideo, 1946, 20, 313-324.—Description of organization and services of the Guidance Institute of the Catholic Charities of New York.—R. J. Corsini.

1910. Gordon, J. Berkeley. *The relation of the church to mental hospitals*. *Psychiat. Quart. Suppl.*, 1946, 20, 23-29.—Both religion and psychiatry are concerned with ideas, thought processes, mental mechanisms, emotions, and symbols of various types. These two disciplines share the common weakness that the test of the ultimate worth, orthodoxy and acceptability of ideas and behavior in each case, is the interpretation of the experts, the theologian and the psychiatrist, who can interpret only in accordance with their own background and conditionings. The priest can assist the psychiatrist or social worker by aiding in the establishment of productive relationships with his parishioner. He can further be of assistance in establishing the truth or falsity of delusions by virtue of his knowledge of the patient and in interpreting the mental hospital to the community by virtue of his position in the community. Mental hospitals can aid the church by the establishment of chaplaincies in these hospitals. A weekly seminar conducted by such a chaplain is suggested as a means of teaching community clergymen something about the human personality in health and disease and about the fundamentals of mental mechanisms.—W. E. Artus.

1911. Hobbs, Nicholas. *Psychological research and services in an Army Air Forces convalescent hospital*. In *Ohio State University, Abstracts of doctoral dissertations . . . 1945-46*. Columbus, 1947, No. 51, 71-79.—Abstract of Ph.D. thesis.

1912. Laycock, S. R. The mental hygiene view of character-education in schools. *Understanding the Child*, 1947, 16, 15-20.—". . . character-education involves much more than mere habit formation, important as good habit-formation is. As part of the training in group living, youngsters must be led consciously to choose values as their own and to pursue these values in ever widening areas of their daily living."—S. B. Sarason.

1913. Lion, Ernest G., Jambor, Helen M., Corrigan, Hazle G., & Bradway, Katherine P. An experiment in the psychiatric treatment of promiscuous girls. San Francisco: Department of Public Health, 1945. Pp. 68.—This is a study of 365 promiscuous girls and women of 20 years average age who, generally, had been referred routinely by a venereal disease clinic to the psychiatric service which operated in conjunction with the clinic. Included in the group were an unstated number of single women who had engaged in sexual relations with one man more than twice during the preceding 6 months. Uncontrolled interviews were used for securing data and for treatment. Frequent background factors were: broken homes; unstable interpersonal relationships; uneven physical, intellectual, emotional, and social maturation; and general neurotic tendencies. Motivational factors of 239 patients were classified as follows: affectional group (not more than two partners) 12%; episodic group (out of spite, to overcome loneliness, etc.) 24%; dependent group (lacking self-sufficiency and mature judgment) 11%; conflict group (egocentrism, fears, distrust, hostilities) 34%; maladapted group (tending toward psychopathy) 13%; non-conflict group (merely to satisfy sexual desires) 6%. Two-thirds accepted some kind of psychiatric treatment, of whom 40% could be followed up. 90% of the follow-ups showed marked improvement with reference to promiscuity.—H. L. Ansbacher.

1914. Louttit, C. M. (Sampson, N. Y.) *Clinical psychology of children's behavior problems*. (Rev. ed.) New York: Harper, 1947. Pp. xviii + 661. \$4.50.—The revised edition maintains the same focal interest in children that was present in the first edition (see 10: 6044). The greater part of the book is concerned with a detailed description of the methods of diagnosis, etiology, nature, and treatment or management of the full variety of psychological problems presented by children. There has been some reorganization of material; the chapter on the nature of problem behavior now follows the introduction, a new chapter on treatment procedures has been added, and the chapter on psychoses and psychoneuroses dropped. The chapter on treatment includes a general theoretical discussion and brief descriptions of environmental and personal manipulation methods. New material has been added to

the chapters on specific topics to bring them up to date, while some other materials have been eliminated or consolidated. Subject bibliographies follow each chapter.—J. B. Rotter.

1915. Nunes, Merícia. *A assistência às crianças anormais em Portugal*. (Services for abnormal children in Portugal.) *Criança portug.*, 1945-46, 1/2, 93-158.—The history, present condition, and planned future developments of the child-caring institutions for abnormal children in Portugal are discussed. Illustrations of the operations of the institutions and of the buildings. French summary.—R. J. Corsini.

1916. Pearson, Grosvenor B., & Rosenzweig, Saul. (Western State Psychiatric Institute, Pittsburgh, Pa.) The selection of patients for the Western State Psychiatric Institute. *Psychiat. Quart. Suppl.*, 1946, 20, 86-97.—The policy governing the admission of patients at this Institute is one which is designed to further the chief aims of the Institute in fostering the interests of psychiatry and related teaching and research in Pennsylvania. Patients are admitted by transfer from the state hospitals throughout Pennsylvania according to the needs of the Institute and the availability of the patients needed. Periods of residence are brief so as to be consistent with the changing needs of teaching and research. Instructional needs at present figure predominantly in the admission policy. No patients are accepted for whom adequate treatment cannot be provided. Furthermore, definite proportions of patients of each general diagnostic classification are maintained in residence. An examination of the diagnoses given to entering patients revealed an accuracy in diagnosis.—W. E. Artus.

1917. Rotenberg, Gertrude. Can problem adolescents be aided apart from their parents? *Smith Coll. Stud. soc. Work*, 1947, 17, 204-222.—Case records of 27 adolescent girls were analyzed for effect of therapy. As in other studies, treatment success was found to be related to a parent's willingness to accept parallel treatment and capacity to use it. However, 5 girls improved even though their parents did not. They were distinguishable by their close ties to their mothers, by inability to express aggression toward their mothers, and by a desire for help.—M. R. Jones.

1918. Schachter, M., & Cotte, S. *Profils rorschachiens de quelques enfants "difficiles" "problem-children"*. (Rorschach profiles of some problem children.) *Criança portug.*, 1945-46, 5, 165-183.—The Rorschach test is no panacea for problem children but is a valuable adjunct to other psychological techniques. Five Rorschach protocols were analyzed blind and interpretations were held to be valid by those who had clinical knowledge of the cases. The Rorschach test permits penetration into the structure of the problem child but calls for expert administration and evaluation.—R. J. Corsini.

1919. Thewlis, Malford W. (Wakefield, R. I.) *The care of the aged (geriatrics)*. (5th ed. rev.) St. Louis: C. V. Mosby, 1946. Pp. 500. \$8.00.—

This fifth edition of a book first published in 1919 is divided into 8 parts: general considerations, geratology, medicolegal relations, miscellaneous geriatric problems, diseases of metabolism and endocrine disorders, infectious disease and focal infection, systematic pathologic conditions, and special topics. The 33 chapters, devoted mainly to medical topics, include the following: History of Geriatrics; The Neglect of the Aged; Life Extension; General Problems of Aging; Stress and Longevity; Hobbies; Special Senses; and Neurology, the last including sections on the mind, the psychoses, mental hygiene, and psychotherapy. Chapter bibliographies range from 5 to 119 entries.—R. G. Kuhlen.

1920. Weider, Arthur, Brodman, Keeve, Mittelman, Bela, Wechsler, David, & Wolff, Harold G. *The Cornell Index; a method for quickly assaying personality and psychosomatic disturbances, to be used as an adjunct to interview.* *Psychosom. Med.*, 1946, 8, 411-413.—A description of the Cornell Index and the method of scoring it, with statistics demonstrating the screening usefulness of this test. The authors outline the situations where the Index can be used advantageously such as neurologic and psychiatric wards and out-patient departments, medical and surgical wards and out-patient departments, industry, returning service men, and research.—P. S. de Q. Cabot.

1921. [Young Men's Christian Associations.] *Counseling young adults; a symposium.* New York: Association Press, 1947. Pp. 40. \$0.75.—A symposium of brief discussions on guidance problems including values, needs, organization, procedures, and methods written particularly for use of "counselors and other staff workers in Y.M.C.A.'s and similar agencies. . . ."—C. M. Louttit.

[See also abstracts 1717, 1736, 1788, 1795, 1820, 1827, 1974, 1976, 1977, 1978, 2045, 2047, 2050.]

PERSONALITY AND CHARACTER

1922. Anderson, W. E. (*State Teachers Coll., Montgomery, Ala.*) *The personality characteristics of 153 Negro pupils, Dunbar High School, Okmulgee, Oklahoma.* *J. Negro Educ.*, 1947, 16, 44-48.—In order to determine their personality characteristics, 153 pupils currently enrolled at the Dunbar High School, Okmulgee, Oklahoma, were given (1) the Higher Form A of the Otis Self-Administering Test of Mental Ability, (2) the California Test of Mental Maturity, Advanced Series, Grade A Adult, and (3) the California Test of Personality, Secondary Series, Form A. On the Otis, 69% had IQ's in excess of 100; 20% fell between 90 and 99; and 10% ranged between 80 and 89. No sex differences were found. The correlation between the Otis and Mental Maturity tests was $.917 \pm .07$. Pupils at the Dunbar school have not achieved satisfactory personality adjustment, since they were exceeded by 70% of the normative group on the California Test of Personality. Self-adjustment was poorer than social adjustment. It was concluded

that this particular high school is not meeting the personality needs of its students.—A. Burton.

1923. Barahal, Hyman S. *The cruel vegetarian.* *Psychiat. Quart. Suppl.*, 1946, 20, 3-13.—An hypothesis about the motivation of the vegetarian is presented. As in many examples of odd behavior, the activity represents an emotion directly opposite to the one which is superficially apparent. The author concludes that the vegetarian, who professes an unusual compassion for animals, is actually an individual with underlying tendencies toward cruelty and sadism. Cases are cited to substantiate this view.—W. E. Artus.

1924. Bergler, Edmund. *Psychopathology of pseudo-humbugs and pseudo-bluffers.* *Psychiat. Quart. Suppl.*, 1946, 20, 14-22.—The cases of 6 so-called pseudo-humbugs and pseudo-bluffers are reviewed. These patients, 4 specialists in advertising, a journalist, and a dramatic critic, are identified as frustrated writers or artists, covering up feelings of dissatisfaction and of depression with a superficial flamboyance, always under pressure from a feeling of guilt. Excitement about advertising "campaigns" is said to be a manifestation of voyeuristic (scopophilia) tendencies. The substitution of exhibitionism for voyeurism takes place only on the condition that humbug is displayed. Constant mockery from the sadistic inner conscience is the result. So, the pseudo-bluffer actually exhibits a combination of oral-masochistic tendencies together with a typical solution of the problem of scopophilia. The total picture is of an individual who is orally regressed.—W. E. Artus.

1925. Dambuyant, M. *Remarques sur le moi dans la déportation.* (Observations on the self as it is affected by deportation.) *J. Psychol. norm. path.*, 1946, 39, 181-203.—The writer describes the effects of a year and a half of war imprisonment upon those attitudes toward things, people, and ideas that represent the distinctive features of personality. Nine months in a prison at Frèsnes, although inducing a sense of withdrawal from the world, she felt to be less destructive to the personality than the utterly senseless, futile life at Ravensbrück concentration camp—a life without memories or hopes, without a past or a future—an existence in a completely strange, unreal world, in which the lack of logic, social communication, politeness was suffered even more bitterly than the cruel physical deprivations. Still later at a work camp she felt a certain revival of normal selfhood growing out of the fact that she was engaged in an intelligently planned activity—even though the project—being German—was hateful to her. She reviews the effects of strong personal convictions, of traditional and transient dramatic roles, and of the ego-ideal in reinforcing or threatening the self. Finally, she analyzes the factors affecting readjustment and the reasons for readopting upon a return to normal living much the same personality pattern that one had started with—a fact which gives some support to the idea of "style" or self-consistency.—M. Sheehan.

1926. Ellis, Albert. Discussion of Heinlein's comment on "The Validity of Personality Questionnaires." *Psychol. Bull.*, 1947, 44, 83-86.—A reply is made to the criticisms of the author's previous report (see 21: 502, 1928).—S. Ross.

1927. Frenkel-Brunswik, Else, & Sanford, R. Nevitt. The anti-Semitic personality; a research report. In Simmel, E., *Anti-Semitism*. New York: International Universities Press, 1946. Pp. 96-124.—This is a presentation of the clinical findings from the administration of a questionnaire designed to test the capacity to accept or reject anti-Semitic statements and attitudes, and the findings from the administration of projective tests to elucidate the personality structures of selected subjects.—M. H. Erickson.

1928. Heinlein, Christian Paul. (Florida State Coll. for Women, Tallahassee, Fla.) Comment on "The Validity of Personality Questionnaires." *Psychol. Bull.*, 1947, 44, 80-82.—The present writer questions the use of certain verbal categories assigned to arbitrary segments of the familiar Pearsonian scale of correlation coefficients by Albert Ellis (see 21: 502). The need for an adequate pragmatic proof of the efficacy of r as an index of validity for a specific type of personality questionnaire or test situation is stressed. (See also 21: 1926).—S. Ross.

1929. Kaback, Goldie Ruth. Vocational personalities; an application of the Rorschach group method. *Teach. Coll. Contr. Educ.*, 1946, No. 924. Pp. x + 116.—The Rorschach group method was administered to 75 pharmacists and 75 accountants, engaged in their respective professions. The same test was also given to 75 pharmacy and 75 accountancy students. An attempt was made to ascertain possible differences in the Rorschach response patterns between the two professional groups and the two corresponding student groups. A comparison with results of miscellaneous vocational groups, obtained from the literature, was also made. Though certain quantitative and statistical differences in respect to some Rorschach factors were obtained, the author concludes that the "results of this investigation fail to show that any Pharmacy or Accountancy personality type exists. Each profession appears to attract persons with varying degrees of emotional stability, introversion, extroversion, intellectual level, etc." 151-item bibliography.—A. Rabin.

1930. Ramzy, I. Personality tests: II. Rorschach test. *Egypt. J. Psychol.*, 1946, 2, 268-281.—The author discusses projection and projective techniques and summarizes the development, administration, scoring, and interpretation of the Rorschach test. The value of the test is questioned, as reports of reliability are often contradictory, statistical validation has not been demonstrated, and norms are lacking. The test needs more research, but may supplement rather than displace fundamental psychological practices.—G. S. Speer.

1931. Scott, J. P. Incomplete adjustment caused by frustration of untrained fighting mice. *J. comp. Psychol.*, 1946, 39, 379-390.—Inexperienced mice were frustrated in their attempts to adjust to trained fighters in two ways: by the overwhelming force of the attack and by restricting the space in which they could escape. The adjustment to defeat was a change from fighting to running away in large pens, and to a defense posture in small pens. Since these types are partially useful they are classified as incomplete adjustment, and the hypothesis that frustration of inexperienced fighting mice results in incomplete adjustments is assumed to be correct. 19 references.—K. F. Muenzinger.

1932. Silverman, Sylvia S. Clothing and appearance; their psychological implications for teenage girls. *Teach. Coll. Contr. Educ.*, 1945, No. 912. Pp. viii + 140.—The first part of this research study consists of a questionnaire survey on the actual clothing and grooming practices and attitudes of adolescent girls. Results of the questionnaire, administered to 373 high-school girls varying in age from 12 through 18, provide detailed factual information on a wide variety of items, such as extent of use of different types of cosmetics, preferences for certain articles of clothing and jewelry, etc., according to age group. Questionnaire findings also indicate the great importance attached by adolescent girls, regardless of age, to clothing and appearance in terms of such factors as personal popularity and sexual attraction. In the second and major part of the study, one group of girls rated highest in their appearance by their teachers and one group rated lowest in appearance were given a personality test (the Sheviakov and Friedberg "Interests and Activities" schedule). According to their responses on this test, the poor appearance group were more negativistic, more withdrawn, more self-effacing and less interested in people and social activities. Further illustration of the relationship between appearance and personality is given in 6 detailed case histories, each of which shows how appearance behavior may express the total personality picture of the individual girl. 114-item bibliography.—E. Raskin.

[See also abstracts 1717, 1818, 1875, 1876, 1880, 1883, 1920, 1957, 1980.]

GENERAL SOCIAL PROCESSES

(incl. Aesthetics)

1933. Boggs, S. W. (State Department, Washington, D. C.) Cartohypnosis. *Libr. J.*, 1947, 72, 433-435; 446.—Maps, because of the apparent facility with which their meaning is perceived, are a potent propaganda tool which was not neglected by the Nazis. Because of the ease with which a map may be misleading it is desirable that people be educated in the nature of maps and their construction. Further, maps may serve as a valuable aid in illustrating many phenomena of the relations of peoples and other social problems.—C. M. Louttit.

1934. Edgerton, Alanson H. (*U. Wisconsin, Madison, Wis.*) **Readjustment or revolution? A guide to economic, educational, and social readjustment of war veterans, ex-war workers, and oncoming youth.** New York: Whittlesey House, McGraw-Hill, 1946. Pp. xi + 238. \$2.50.—In 3 parts, (1) *Reorientation and Readjustment*, (2) *Reconstruction, Reeducation, and Reemployment*, and (3) *Reclaiming Human Resources*, the author analyzes a series of follow-up studies of 35,224 war veterans, 52,378 war workers, and 38,653 secondary school and college students from 143 communities of 29 states. He predicts that serious difficulty lies ahead for the nation unless governmental, industrial, business, educational, and other social agencies face the adjustment and readjustment problems of its young men and women and take necessary action in a realistic and positive manner. Unsuccessful educational and rehabilitative programs are discussed, and suggestions are offered for their revision to meet current needs.—S. Kavruck.

1935. Holloway, Owen E. **Perspective in the arts of space and time.** *Egypt. J. Psychol.*, 1946, 2, 22-38.—The author discusses the techniques and devices that have been used in painting, drama, and literature, to give reality to the sense of movement of time and in space.—G. S. Speer.

1936. Jenkins, William O. (*Indiana U., Bloomington, Ind.*) **A review of leadership studies with particular reference to military problems.** *Psychol. Bull.*, 1947, 44, 54-79.—The techniques and results of studies of leadership in industry, government, professions, schools, and military life are reviewed. Research studies of military officer personnel selection are stressed. A list of hypotheses for further investigation is developed. 74-item bibliography.—S. Ross.

1937. Murphy, Gardner. **Psychological prerequisites for a sound foreign policy.** *J. soc. Issues*, 1946, 2, No. 4, 15-26.—Replying to the request for scientific counsel on human problems in foreign policy, the writer states: Russian-American relations will improve by making the Russian outlook understandable to Americans, together with open discussion of vital interests and action in support of democratic principles. Loyalties toward the United Nations can be secured through emphasis on the benefits of international co-operation. Democracy can be reinforced by encouraging active participation in the determination of foreign policy. Suggestions for research together with mentions of current research on these points are embodied in the article.—L. M. Hanks, Jr.

1938. Russell, Francis H. **Oil for the lamps of democracy.** *J. soc. Issues*, 1946, 2, No. 4, 7-14.—Knowledge of human nature should be used in the solution of the problems of a democracy. In foreign policy the writer poses questions dealing with public attitudes on various issues. What are to be the popular reactions to international control of atomic energy, current explanations of politico-economic problems, curtailment of national sovereignty, and

measures fostering positive relations between national groups? What factors will help predict national psychopathic tendencies? How can the popular will be ascertained and communicated to public administrators? These questions of public opinion reinforce and set the limits on foreign policy.—L. M. Hanks, Jr.

1939. Staats, Lorin Coover. **The extent of variation of the denotative meanings attached by audiences to the forty-six common nouns, in context, in an excerpt from a speech delivered by Franklin Delano Roosevelt on November 4, 1940.** In *Ohio State University, Abstracts of doctoral dissertations . . . 1945-46*. Columbus, 1947, No. 51, 115-123.—Abstract of Ph.D. thesis.

METHODS AND MEASUREMENTS

1940. Baldau, Frank W. **An agency administrator suggests a working relationship.** *J. soc. Issues*, 1946, 2, No. 4, 75-76.—Action agencies working on social problems in various communities would be aided by the establishment of a centralized social science research agency that would communicate findings between communities attacking similar problems and offer consulting services.—L. M. Hanks, Jr.

1941. Baldau, Frank W. **Intergroup relations and action programs.** *J. soc. Issues*, 1946, 2, No. 4, 27-33.—Problems appearing in action programs designed to foster intergroup co-operation are presented. What is the effect of publicity or censorship of news abetting or curtailing racial animosity? What techniques beyond exhortation are effective in changing attitudes? What causes fluctuation in intergroup hostility?—L. M. Hanks, Jr.

1942. Campbell, Angus. **Polling, open interviewing, and the problem of interpretation.** *J. soc. Issues*, 1946, 2, No. 4, 67-71.—Polling should be limited to attacking questions that are well understood by the public and clear-cut. For the remaining questions the open interview is to be preferred, since it reveals the respondent's interpretation of a question and the intensity of his answer.—L. M. Hanks, Jr.

1943. Chapman, Dwight. **Summary—methods, theory, and appraisal.** *J. soc. Issues*, 1946, 2, No. 4, 72-74.—This concluding statement of a symposium on methodology as applied to social problems emphasizes that procedures are limited in fruitfulness by the richness of the hypotheses which they test and that the methods proceed at their own risk, if they neglect the techniques and pitfalls of allied fields.—L. M. Hanks, Jr.

1944. Katz, Daniel. **Survey technique and polling procedure as methods in social science.** *J. soc. Issues*, 1946, 2, No. 4, 62-66.—The survey differs from the opinion poll in its applicability to questions where public opinion is not crystallized and in its use of plural devices for measuring a given variable. The survey technique has been applied to measure-

ment of morale in war industries and morale as influenced by bombing in Germany.—*L. M. Hanks, Jr.*

1945. Krech, David. *The challenge and the promise.* *J. soc. Issues*, 1946, 2, No. 4, 2-6.—The introductory article to this journal's number on action and research maintains that despite pressing need for social science research, social science cannot gain support for lack of tangible achievements. Social scientists have been overcautious in their claims and have also failed to work on the problems that members of a society wish to solve. Hence social problems become a challenge to the ingenuity of scientists to recognize and to cope with by scientific methods.—*L. M. Hanks, Jr.*

1946. Lewin, Kurt. *Action research and minority problems.* *J. soc. Issues*, 1946, 2, No. 4, 34-46.—Action research suffers from lack of measures of achievement. The kind of research needed must take into account so-called basic research, a multiplicity of points of attack, and knowledge of the specific and general laws of the situation in hand. It must occupy a position that permits relating itself to planning and action, as well as determining the results of action. Such a position for research is described in a workshop for community workers in Connecticut. Comparable programs are blocked by administrators who feel there is nothing to be gained from social science, persons in power who fear they will be revealed, and popular fear of a technocracy. The solution to many problems of minorities is the enhancement of the self-esteem of the minority group in question.—*L. M. Hanks, Jr.*

1947. Lippitt, Ronald. *Techniques for research in group living.* *J. soc. Issues*, 1946, 2, No. 4, 55-61.—Study of membership, thinking, and decisions of groups call for close collaboration between investigator and participants. Problems arising from this type of procedure are: accustoming the group to data collecting, selecting relevant data, making use of all of the data, and translating the findings into action. Effective solutions of these problems are discussed.—*L. M. Hanks, Jr.*

1948. MacKinnon, Donald W. *The use of clinical methods in social psychology.* *J. soc. Issues*, 1946, 2, No. 4, 47-54.—A wide variety of clinical techniques are recommended for the study of group tensions and other problems in social psychology. This has already begun in the California Public Opinion study. Problems of group or community integration may also be studied under conditions similar to the assessment center of the Office of Strategic Services.—*L. M. Hanks, Jr.*

CULTURES AND CULTURAL RELATIONS

1949. Adorno, T. W. *Anti-Semitism and fascist propaganda.* In *Simmel, E., Anti-Semitism.* New York: International Universities Press, 1946. Pp. 125-137.—The force of the psychology of propaganda lies in its appeal to unconscious needs, and the most effective countering of such propaganda lies in pointing out the self-destructive implications of

such appeals to unconscious motivations.—*M. H. Erickson.*

1950. Baruch, Dorothy W. *Glass house of prejudice.* New York: Morrow, 1946. Pp. ix + 205. \$2.50.—Racial prejudice arises from ignorance, frustration, and fear, and is fostered by individuals and groups for reasons of economic insecurity and emotional bias. Among the results of prejudice are strife, subjugation of minorities, and violations of fundamental principles. Prejudices can be reduced or eliminated by knowledge and by correction of personal frustrations, which may be shown by antiminority aggression. These three aspects of the question of racial discrimination are discussed with illustrative cases. There are 21 pages of bibliographic notes.—*C. M. Louttit.*

1951. Bayton, James A., & Byoune, Eththel F. (*Morgan State Coll., Baltimore, Md.*) *Racio-national stereotypes held by Negroes.* *J. Negro Educ.*, 1947, 16, 49-56.—A group of 102 southern Negro college students and 50 Negro high school students were asked to express attitudes regarding the following racial groups: white Americans, Negro Americans, Jews, Japanese, and Germans. It was found that the stereotype of the Negro held by the Negro subjects is similar to that held by whites. However, Negroes omit the "ignorant-dirty" pattern but add ambition and progressiveness. The Negro's stereotype of the white American is essentially similar to that held by the whites. However, "grasping—deceitful—cruel—quick-tempered" patterns are often given. No deep-seated anti-Semitism was manifested. The Negro's stereotype of the Japanese and German indicates "attitudes developed in terms of national group membership rather than in terms of racial group membership."—*A. Burton.*

1952. Berliner, Bernhard. *On some religious motives of anti-Semitism.* In *Simmel, E., Anti-Semitism.* New York: International Universities Press, 1946. Pp. 79-84.—Adherence to a paternalistic spirit in religion and culture is the nucleus of Jewish mentality, and in this lies the motivation for an unconscious conflict for both the Jew and the anti-Semite.—*M. H. Erickson.*

1953. Dingwall, Eric John. *Racial pride and prejudice.* London: Watts, 1946. Pp. x + 246. 8s 6d. In Africa color prejudice springs from (a) feeling of dominance and desire to protect that dominance, (b) conflict between Christian principles and unchristian inequality, and (c) economic factors. In the United States, color prejudice is a rationalization of those who profess Christian democracy for not practicing it, and the rape obsession is a result of sexual frustration engendered by Puritanism and modern Catholicism. A survey of the color bar in the United States, Great Britain, Africa, West Indies, India, the East, Brazil, Australia, New Zealand, and U.S.S.R. reveals that it is most intense in the United States and in the colonies and dominions of the British Empire and Belgium Congo; somewhat less in French and Dutch colonies, much less in Portuguese possessions, and the least of all in Brazil

and U.S.S.R. There is also a brief discussion of causes of anti-Semitism and the early prejudice against the Mormons.—G. K. Morlan.

1954. Fenichel, Otto. Elements of a psychoanalytic theory of anti-Semitism. In *Simmel, E., Anti-Semitism*. New York: International Universities Press, 1946. Pp. 11-32.—Psychoanalysis of anti-Semites is requisite to any understanding of anti-Semitism. "The anti-semitic arrives at his hate of the Jews by a process of displacement, stimulated from without. He sees in the Jew everything which brings him misery—not only his social oppressor but also his own unconscious instincts, which have gained a bloody, dirty, dreadful character from their socially induced repression. He can project onto the Jews, because the actual peculiarities of Jewish life, the strangeness of their mental culture, their bodily (black) and religious (God of the oppressed peoples) peculiarities, and their old customs make them suitable for such a projection."—M. H. Erickson.

1955. Fisk University. Social Science Institute. (Nashville, Tenn.) Orientals and their cultural adjustment; interviews, life histories and social adjustment experiences of Chinese and Japanese of varying backgrounds and length of residence in the United States. *Fisk Univ. soc. Sci. Source Docum.*, 1946, No. 4. Pp. x + 138.—The theory is put forth that "numerous human problems stemming from the contact and association of races and cultures can be stated abstractly in terms of the cycle of race relations." The Oriental immigrant achieves status and social satisfaction within his own group. Although the second generation acquires dominant language and cultural skills, it is excluded from both the immigrant parent and dominant groups, being "psychologically marginal" due to racial and cultural conflicts. Denial of dominant group membership to the third generation instigates the essential race problem. Cultural and social adjustment and race relations are functionally interrelated. The book comprises personal documents collected by Robert E. Park on the Pacific Coast between 1924 and 1929. The material includes protocols of foreign-born and American-born Japanese, Filipinos, and Chinese. Also included is an account by a native white woman of her life with two Oriental husbands.—J. C. Franklin.

1956. Garber, Clark M. (Butler, Ohio.) Eskimo infanticide. *Sci. Mon.*, N. Y., 1947, 64, 98-102.—An examination of all the important authentic reports suggests that the practice of Eskimo infanticide is a "blind biological response to the rigid economic factors" with which they are faced. Since the coming of the white man's civil code, the practice is dying out or is performed in utmost secrecy.—E. Girden.

1957. Henry, William E. (U. Chicago, Chicago, Ill.) The Thematic Apperception Technique in the study of culture-personality relations. *Genet. Psychol. Monogr.*, 1947, 35, 3-135.—The major problem of this investigation can be divided into two parts:

(1) to determine whether or not the Thematic Apperception Technique (TAT) yields valid and useful data on the personalities of individual children in other societies, and (2) to determine whether this technique yields data that will contribute to an understanding of the society as a whole. About 1,000 children ranging in age from 6 to 18 years, from Papago, United Pueblos, Hopi, Navaho, and Pine Ridge Reservations were studied and tested. The author concludes that the TAT does provide very valuable data for studying personality structure and development in other societies. Studies made on the Hopi and Navaho indicate that the TAT provides data with regard to some general features of the society that are operative in the formation of personality and the resultant psychological characteristics.—L. Long.

1958. Horkheimer, Max. Sociological background of the psychoanalytic approach. In *Simmel, E., Anti-Semitism*. New York: International Universities Press, 1946. Pp. 1-10.—The psychological forces within the individual, reinforced by overwhelming historical factors and economic factors beyond the control of man, serve to augment and to continue anti-Semitism.—M. H. Erickson.

1959. Hughes, Everett Cherrington. Race relations in industry. In *Whyte, W. F., Industry and society*. New York: McGraw-Hill, 1946. Pp. 107-122.—This is a discussion of the relations of Negroes with other persons in American industry at the present time. To know about race relations in industry and to deal with them, one must look upon them as being of the same general order as other relations of people at work. We must apply to the problem of race relations all that we know and can learn about human relations in industry.—S. G. Dulsky.

1960. Ichheiser, Gustav. Diagnosis of antisemitism; two essays. *Sociometry Monogr.*, 1946, No. 8. Pp. 27.—See 19: 1743.

1961. Link, Henry C. The rediscovery of morals, with special reference to race and class conflict. New York: Dutton, 1947. Pp. 223. \$2.50.—Crime, race discrimination, class conflict, and socialism are due primarily to moral deficiency rather than economic inequality and insecurity. Brief suggestions are made for reducing prejudice by education, organized religion, and legislation. 72-item bibliography.—G. K. Morlan.

1962. Orr, Douglass W. Anti-Semitism and the psychopathology of everyday life. In *Simmel, E., Anti-Semitism*. New York: International Universities Press, 1946. Pp. 85-95.—The psychology of prejudice, as manifested in individual fears, hostilities, inadequacies, and insecurities, leads to a displacement upon socially available scapegoats.—M. H. Erickson.

1963. Simmel, Ernst. Anti-Semitism and mass psychopathology. In *Simmel, E., Anti-Semitism*. New York: International Universities Press, 1946. Pp. 33-78.—Anti-Semitism is not a mass neurosis.

However, it may be employed as a stratagem for the masses so that it can become clinically an unrestricted aggressive destructiveness under the force of a delusion and hence a mass psychosis. Therefore, understanding of it must rest upon research into the psychology of defamation and calumny and the psychology of group behavior. 15 references.—*M. H. Erickson.*

1964. Simmel, Ernst, [Ed.]. *Anti-Semitism, a social disease.* New York: International Universities Press, 1946. Pp. xxvii + 140. \$2.50.—Prejudice arises from unconscious factors and can be dealt with in the individual only by psychoanalysis and by conscious methods for the social group such as education, publication of research, and legislation. The general sociological background, the historical forces, the role of religious ideation, economic factors beyond the control of man, and the even greater importance of individual fears, hostilities, and insecurities on the part of the anti-Semite as well as others are discussed in relationship to anti-Semitism. Included in this symposium by 7 authors are an introduction by the editor, brief biographies of the contributors, and a general 7-item bibliography. For individual chapter contributions see 21: 1927, 1949, 1952, 1954, 1958, 1962, 1963.—*M. H. Erickson.*

1965. Underhill, Ruth Murray. *Papago Indian religion.* *Columbia Univ. Contr. Anthropol.*, 1946, No. 33. Pp. vi + 359. \$4.50.—Retained only in the memories of the aged and being discontinued and forgotten in present-day life, the details of tribal ore and religious practices of the Papago Indians in the southern deserts of Arizona have now been recorded after extensive research over a 15-month period of research with interpreters. The agricultural background and the general character of the ceremonies are discussed, and there follow accounts of (1) communal ceremonies, such as rainmaking, growth promoting, hunting, intervillage games, and the prayer-stick festival; (2) ceremonies for individual power, such as warfare, salt pilgrimage, eagle killing, and girls' puberty dance; and (3) the use of power, such as shamanism and by healers other than the shaman. The final division, Acculturation, discusses their present-day practices which reflect to some degree the ancient rituals and the influence of more recent cultural forces. 85-item bibliography.—*M. H. Erickson.*

SOCIAL INSTITUTIONS

1966. Adams, Clifford R. (*Pennsylvania State Coll., Pa.*), & Packard, Vance O. *How to pick a mate; the guide to a happy marriage.* New York: Dutton, 1946. Pp. 215. \$2.75.—The authors present a popularly written summary of experimental and clinical findings in the area of premarital counseling designed for self-analysis and as a supplement to personal counseling. 63-item bibliography of additional readings.—*C. M. Louttit.*

1967. Gomberg, M. Robert. (*Jewish Family Service, New York.*) *Counseling as a service of the family agency.* In Taft, J., *Counseling and protec-*

tive service as family case work. Philadelphia: Pennsylvania School of Social Work, 1946. Pp. 13-41.—The author attempts "to describe and delimit an area of psychological counseling that derives naturally from case work training, experience, and orientation." This he does by discussing the functions of the family case work agency and illustrates with excerpts from a counseling case.—*C. M. Louttit.*

1968. Gomberg, M. Robert. (*Jewish Family Service, New York.*) *The Gold case, a marital problem.* In Taft, J., *Counseling and protective service as family case work.* Philadelphia: Pennsylvania School of Social Work, 1946. Pp. 42-82.—A case illustrating "the potentiality of the counseling process for helping with a marital relationship that has become too difficult for one or both of the partners to bear without some outside support or interference."—*C. M. Louttit.*

1969. Hertzler, J. O. (*U. Nebraska, Lincoln, Nebr.*) *Social institutions.* (Rev. ed.) Lincoln, Neb.: University of Nebraska Press, 1946. Pp. x + 346. \$4.00.—This is a detailed theoretical analysis of social institutions, "their causes, functions, composition, implementation, relationships, and the effects upon them of various internal and external changes." The analysis involves such concepts as "social organization, societal maintenance, social control, culture, human ecology, social change . . . social processes . . . social reorganization . . . social values," and "the individual as integrator, modifier, and dominator of institutions."—*V. Nowlis.*

1970. Kaufman, Harold F. *Defining prestige in a rural community.* *Sociometry Monogr.*, 1946, No. 10. Pp. 26.—See 20: 237, 2814.

1971. Knapp, Patricia, & Cambria, Sophie T. *The attitude of Negro unmarried mothers toward illegitimacy.* *Smith Coll. Stud. soc. Work*, 1947, 17, 185-203.—Case records of 49 unmarried Negro mothers living in Washington, D. C. were reviewed. Guilt was more evident in middle than in the lower social class and tended to be negatively correlated with the acceptance of the illegitimate pregnancy by the client's family. Promiscuity was less acceptable than illegitimate pregnancy. More than three-fourths of the cases accepted illegitimate pregnancy with little or no evidence of guilt over violating a moral code. General emotional adjustment was unrelated to attitude toward illegitimacy.—*M. R. Jones.*

1972. Munro, Marguerite. (*Brooklyn Bureau of Social Service, Brooklyn, N. Y.*) *The family agency in the post-war period.* In Taft, J., *Counseling and protective service as family case work.* Philadelphia: Pennsylvania School of Social Work, 1946. Pp. 5-12.—The two most frequent threats to family life are financial insecurity and strained personal relationships. The family agency, to carry out its function in strengthening family life, finds it necessary to make available more frequently family and personal counseling.—*C. M. Louttit.*

1973. Robertson, Nancy E., & Waites, J. A. The present House of Commons: its educational and social background. *Brit. J. Psychol.*, 1947, 37, 96-108.—A questionnaire relating to education, other occupations, etc., was circulated to all Members and Officials of the House of Commons in 1945. The 456 replies received were analyzed to show the varying types of education and upbringing of members of the different political parties. These results were also compared with those obtained by Barbara Wootton from a previous enquiry in 1937. The background of the present House of Commons not only shows a greater variety of educational experience but also of social environment. The Members themselves are engaged in a wider variety of occupations, and their family environments have provided a wider range of experience. Many of the present M.P.'s began wage-earning at 14, equipped only with an elementary school education. Those who left school early, however, proceeded to educate themselves in other ways through political, trade union, church or chapel activities, through attendance at evening classes, and by winning scholarships to colleges of nonuniversity status. Yet of the total sample, 35% went to public schools and 44% to universities.—M. D. Vernon.

1974. Taft, Jessie [Ed.]. (*Pennsylvania School of Social Work, Philadelphia, Pa.*) **Counseling and protective service as family case work; a functional approach.** Philadelphia: Pennsylvania School of Social Work, 1946. Pp. 162. \$1.50.—The psychological significance of this monograph rests on the discussion of the place of marital counseling in the work of the family case work agency as discussed by the editor and in papers by Munro (see 21: 1972) and Gomberg (see 21: 1967, 1968). In the introduction and a discussion section J. Taft contrasts the agency social worker and the psychiatrist as therapists. Her 2 major points are: (1) that the social worker cannot have the person to person relationship that the psychiatrist must have, and (2) the social worker must usually work within an arbitrarily determined time limit rather than have control over the length and closing of therapy.—C. M. Louttit.

1975. Warner, W. Lloyd, & Low, J. O. **The factory in the community.** In Whyte, W. F., *Industry and society*. New York: McGraw-Hill, 1946. Pp. 21-45.—The influence of the factory on the community and the community on the factory is illustrated by summarizing a study made by a group of social anthropologists over a period of years. The industrial conflict in "Yankee City" is analyzed in terms of social relationships—the causes "can only be found in the whole life of the community in which the workers and owners are but a part."—S. K. Dulsky.

[See also abstracts 1841, 1847, 1849, 1927, 1932, 1993, 2015, 2032, 2039, 2041, 2042.]

CRIME AND DELINQUENCY

1976. Castillo, César R. **Delitos sexuales cometidos por y sobre anormales mentales.** (Sexual

crimes committed by and on the mentally abnormal.) *Arch. Med. leg., B. Aires*, 1946, 16, 153-177.—A case is presented, together with medical, social, and legal data, of a woman, not insane, of low mentality, with a long record of sexual delinquencies. The degree of responsibility of such psychopathic personalities is considered. French summary.—R. J. Corsini.

1977. Cohen, Louis H., (Yale U., New Haven, Conn.) & Coffin, Thomas E. (*Hofstra Coll., Hempstead, N. Y.*) **The pattern of murder in insanity: a criterion of the murderer's abnormality.** *J. crim. Law Criminol.*, 1947, 37, 262-287.—Criteria to aid in deciding upon a murderer's abnormality, apart from actual psychiatric examination, are offered. The nature of the crime itself which involves a "pattern of circumstances" is pointed up as the significant factor in determining the mental condition of a murderer. This pattern is derived from the following factors: (1) the victim, (2) the motive, (3) the method, (4) attitude toward consequences, and (5) behavior before and after the murder. The authors base their tentative conclusions upon 18 cases studied.—V. M. Stark.

1978. Davidson, G. M. **Psychiatric aspects of the law of homicide.** *Psychiat. Quart. Suppl.*, 1946, 20, 30-49.—The writer submits the results of his study of the psychiatric aspects of criminal law. He concludes that there is no single cause for homicide, but rather a multiplicity of causes in a framework of threat to the security of basic psychic and physical needs. Not only must we understand the motivation of the killer but also the specific circumstances surrounding the deed. The author approaches this latter problem by using the concept of the final common path of the total personality, which he identifies with affectivity. Affectivity provides the background for the phenomenon described as the "dominant," which represents an individual's conscious and unconscious difficulties. The dominant has the effect of constricting consciousness and focusing affectivity upon its object, thus reducing judgment to nil and interfering with the ability to choose between, or to subordinate, incoming impulses. Finally, there is a regression of affectivity from cortical to thalamic, with an overflow of impulse into action (homicide). This approach invalidates concepts such as "deliberation," "premeditation," and "design" as measuring instruments for murder. The term "not guilty for reasons of insanity" is improper, as is the term "temporary insanity." Testimony of amnesia ought not to be accepted. Social rehabilitation ought to be guided by evaluating the total personality on the lines suggested by the writer.—W. E. Artus.

1979. Fornwalt, R. J. **Problem boy: a case study in delinquency.** *Sch. & Soc.*, 1946, 64, 356-358.—This account of the social rehabilitation of a 16-year-old delinquent whose misbehavior was diagnosed as compensation for feelings of parental rejection exemplifies the therapeutic possibilities in a sympathetically-planned and prosecuted program of activities

providing constructive outlets for aggressive tendencies. Its more general implications for the treatment of the difficult youth are cited.—*R. C. Strassburger.*

1980. Jallmann, Franz J., & Anastasio, Mary M. (*New York State Psychiatric Institute, New York.*) *Twin studies on the psychopathology of suicide. J. nerv. ment. Dis., 1947, 105, 40-55.*—In an attempt to assess the relative importance of emotional, social, and biological factors leading to suicide, the suicides of twins are analyzed. Since there is little case material in the literature on this subject, the conclusions are based on 11 cases found among 2,500 twin cases from various institutions in New York. In all 11 cases only one twin committed suicide; 8 of these cases were fraternal, 3 identical. An analysis of the personalities and histories of the twin pairs did not reveal any differentiations to account for suicide in the one and lack of suicide in the other twin. Two theories are suggested to account for the consistent discordance of twin pairs as to suicide: (1) that the suicide is an expression of sibling rivalry, or (2) that the factors leading to suicide are so complex that their duplication is unlikely even in identicals with similar psychotic and social histories.—*L. B. Heathers.*

1981. Rojas, Nerio. *Hambre y delito.* (Hunger and crime.) *Arch. Med. leg., B. Aires., 1946, 16, 205-216.*—Hunger and poverty are closely connected with crime in a direct and an indirect manner. When the individual is in need of sustenance, the first is the direct physical and psychological cause of the criminal motivation. Misery and hunger produce crimes against property. The author cites cases of crimes taken from the bibliography of foreign countries as well as Argentina to indicate the nature of such crimes. French summary.—*R. J. Corsini.*

1982. Teeters, Negley K. (*Temple U., Philadelphia, Pa.*) *Penology from Panama to Cape Horn.* Philadelphia: University of Pennsylvania Press for Temple University Publications, 1946. Pp. xiii + 269. \$3.50.—In this survey of penology as practiced today in Central and South American countries, the author presents a comparative study of penal codes, physical structures, and penal procedures. In the countries surveyed, greatest emphasis in classification or diagnostic clinics is placed on biological aspects of the nature of the individual. Little psychiatric, psychological, or social-work approach is used. Where such workers are used they "delve into the heredity and measure the bodies of the inmates, probe for glandular disorders and measure for intelligence, all, apparently, to endeavor to locate the hidden criminal nato, that is, the born criminal." Separate chapters are devoted to the prison systems of Panama, Colombia, Ecuador, Peru, Bolivia, Chile, Argentina, and Brazil. A list of Latin American journals on the subject is given.—*B. Sless.*

[See also abstracts 1913, 1956.]

INDUSTRIAL AND PERSONNEL PROBLEMS

1983. Australia. Department of Labour and National Service. Industrial Welfare Division. *Selection and placement of new employees. Bull. industr. Welf. Div. Aust., 1946, No. 9. Pp. 38.*—This is published for the information of Australian employers and personnel directors. It provides an elementary review of basic elements in good employment procedure. Chapter topics are: recruiting new employees; the reception of applicants, the selection of employees; the induction of new employees; and employment-office records. Use of psychological examinations is stressed, and a brief review of aptitude test construction and application is given. American methods of analyzing and describing jobs are followed. The appendix contains typical Australian personnel record forms and a brief selected bibliography.—*B. Sless.*

1984. Barnard, Chester I. *Functions and pathology of status systems in formal organizations.* In Whyte, W. F., *Industry and society.* New York: McGraw-Hill, 1946. Pp. 46-83.—This analysis is based on the author's organizing and executive experience. Systems of status in formal organizations are necessary as a matter of need of individuals and because imposed by the characteristics of co-operative systems. However, they generate uncontrolled and uncontrollable tendencies to rigidity, hypertrophy, and unbalance that often lead to destruction of organization.—*S. G. Dulsky.*

1985. Bryan, Alice I. (*Columbia U., New York.*) *Legibility of Library of Congress cards and their reproductions. Coll. & Res. Libr., 1945, 6, 447-464.*—Librarians have objected to the *Library of Congress Catalog of Printed Cards*, reproduced in book form, because of poor legibility attributed to excessive reduction in type size, blurring, and reduction of contrast in the offset material. Experts tended to agree that the reproduced material was much less legible than the printed cards. An experiment was designed to compare work output and accuracy when transcribing material from the original Library of Congress cards and from the reproductions. Efficiency, both in terms of amount done and errors, was much less for the reproduced material. The smaller sizes of type caused most of the difficulty. This trend was accentuated for foreign language material. Sixteen of the 24 subjects disapproved of the reductions and reacted emotionally against using them. In estimating cost of use by catalogers of the printed Library of Congress cards, as compared with the bound reproductions, the legibility factor must be taken into account.—*M. A. Tinker.*

1986. Davis, Allison. *The motivation of the underprivileged worker.* In Whyte, W. F., *Industry and society.* New York: McGraw-Hill, 1946. Pp. 84-106.—The motivation of the underprivileged worker differs from the middle class worker because of environment and attitudes. To make one-third of our population productive, society must offer the underprivileged worker a better chance than he now

has of improving his status. This means steady well paid jobs and decent housing.—S. G. Dulsky.

1987. [Davis, Allison, Gardner, Burleigh B., Harbison, Frederick H., Hughes, Everett Cherrington, Warner, W. Lloyd, & Whyte, William Foote.] *Human relations in industry*. In Whyte, W. F., *Industry and society*. New York: McGraw-Hill, 1946. Pp. 1-3.—The Committee on Human Relations in Industry views society and any of its segments as having a social structure comprised of the relations among individuals. The primary interest in its research is directed to the understanding of the social structure and the way in which it controls and molds the individual.—S. G. Dulsky.

1988. [Davis, Allison, Gardner, Burleigh B., Harbison, Frederick H., Hughes, Everett Cherrington, Warner, W. Lloyd, & Whyte, William Foote.] *Industry and society*. In Whyte, W. F., *Industry and society*. New York: McGraw-Hill, 1946. Pp. 183-198.—This is the concluding chapter of *Industry and Society*. Management has been misled by the individualistic point of view and handicapped by the acceptance of an oversimplified theory of human motivation. We must learn to look upon industry as a social system which regulates the behavior of the individual members. Three basic concepts of this volume are: (1) the factory is a status system closely related to the status system of the community; (2) the factory has a formal organization and also an informal organization; (3) the social system of the factory exists in a state of equilibrium—when changes are introduced the system tends to react so as to re-establish its equilibrium.—S. G. Dulsky.

1989. Dunlap, Jack W., & Wantman, Morey J. *An investigation of the interview as a technique for selecting aircraft pilots*. (CAA Airman Developm. Div. Rep. No. 33, 1944; Publ. Bd. No. 50308.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 59. \$2.00, microfilm; \$4.00, photostat.—The investigation of the interview as a technique for selecting aircraft pilots is described in this report. Appendices present aviation interview rating scales, directions for their use, rating data, and sample questions from the answer sheet for the Personal History Inventory. An applicant recorded biographical data on the standard P-H Inventory form. On the basis of this information combined with that obtained by oral questioning, interviewers attempted to predict his success in learning to fly. The report concludes that although the interview shows promise of achieving useful levels of reliability and validity in the selection of pilots, its failure to add to the prediction obtainable by group techniques indicates that its excessive cost in time and money is not justifiable.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1990. Edgerton, Harold A., & Walker, Robert Y. *History and development of the Ohio State Flight Inventory. Part I: Early versions and basic research*. (CAA Div. Res. Rep. No. 47, 1945; Publ. Bd. No. 50319.) Washington, D. C.: U. S. Dep.

Commerce, 1947. Pp. 62. \$2.00, microfilm; \$5.00, photostat.—The development of the Ohio State Flight Inventory represents an attempt to devise a method of evaluating pilot performance which would provide a satisfactory measure of flight competence and also serve as a diagnostic device for the analysis of flight proficiency. The present report describes the early research which led to the formulation and preparation of a comprehensive and standardized check list of items descriptive of a pilot's performance during flight. Appendix I presents frequency distributions for each item of the 1940 version. (See also 21: 2006.)—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1991. Ford, Adelbert, & others. *Selection research of sonar officers; a report on validating research*. (Univ. Calif. Div. War Res. Rep. No. M235, 1944; Publ. Bd. No. 42650.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 19. \$1.00, microfilm; \$2.00, photostat.—Comments on the results of the selection and testing program of naval sonar officers are given, followed by recommendations for selection plans. A simple hurdles administration plan is favored. This would involve satisfactory performance on the Bennett Mechanical Comprehension Test, Form BB, and on the revised Relative Movement Test, as well as on the new Sonar Pitch-Memory Test. Tables are included giving validation to this study.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1992. Frisby, C. B. *Field research in flying training*. *Occup. Psychol., Lond.*, 1947, 21, 24-33.—Two experiments were conducted to evaluate a landing trainer machine designed to give pilot trainees practice in learning to land an airplane. In the first experiment the landing trainer was introduced after 2½ hours of regular flying instruction, and in the second experiment the landing trainer was introduced before any flying instruction was given. The control group had no practice on the landing trainer and received the usual flying instruction. It was concluded from the first experiment that practice on the landing trainer reduced the air time necessary for the average pupil to learn to fly, but had no other noticeable effect on flying apart from landing and take-off. Differences in the second experiment were not statistically significant.—G. S. Speer.

1993. Garnder, Burleigh B. *The factory as a social system*. In Whyte, W. F., *Industry and society*. New York: McGraw-Hill, 1946. Pp. 4-20.—Any factory or business enterprise is a social organization in miniature. To understand the conflicts and maladjustments, it is necessary to understand the stresses the organization imposes on its members. Examples of various social relationships are cited. Only by analyzing good and bad work situations in terms of the structure of relationships involved it is possible to build a science of human relations.—S. G. Dulsky.

1994. Hannaford, Earle S. *Conference leadership in business and industry*. New York: McGraw-Hill,

1945. Pp. xvii + 289. \$3.50.—Development of specific conference leadership techniques in terms of psychological processes is the keynote of the book. Each chapter contains a schematic summary of the chapter content and an objective type examination on the content of the chapter.—*H. P. Mold.*

1995. Harbison, Frederick H. *The basis of industrial conflict.* In Whyte, W. F., *Industry and society.* New York: McGraw-Hill, 1946. Pp. 168-182.—Focal points of conflict between employers and organized labor are: (1) the struggle for prestige with workers; and (2) the question of discipline. Collective bargaining can work successfully when the employer has accepted labor organizations as a constructive force, and when unions have a constructive attitude toward management. When the status and function of each side are clearly recognized by the other, some bitterly contested issues in union-management relations may cease to be focal points of controversy.—*S. G. Dulsky.*

1996. Johnson, Harry M., & Boots, Mary L. *Analysis of ratings in the preliminary phase of the C.A.A. training program.* (CAA Div. Res. Rep. No. 21, 1943; Publ. Bd. No. 50299.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 28. \$1.00, microfilm; \$2.00, photostat.—An analysis was made of the ratings given by instructors and inspectors to students participating in the experimental program for civilian pilot training conducted by the Civil Aeronautics Authority in the spring of 1939. The major portion of the analysis covered records of 178 students without previous flight training. A supplementary analysis was made of the records of 110 students who had had previous flight training. This study, which represents one of the earliest investigations in the field, involves an evaluation of methods actually employed by those responsible for giving instruction and for deciding whether a student pilot should or should not be granted a license to fly a plane.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1997. Kelly, E. Lowell. *The development of a scale for rating pilot competency.* (CAA Div. Res. Rep. No. 18, 1943; Publ. Bd. No. 50297.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 24. \$1.00, microfilm; \$2.00, photostat.—This study contains a description of the method employed in developing the scale and data on the interrelationships among items. A preliminary "man to man" graphic scale covering 3 traits (skill, emotional stability, and judgment) was devised and tried out but discarded because of excessively high intercorrelations between traits. Several other scales were constructed and then the best points of each combined into a 14-item graphic scale for experimental study. A factor analysis of the table of intercorrelations shows that 3 factors are sufficient to account for all intercorrelations of items in the scale: skill, judgment, and emotional control, listed in order of the extent to which the scale measures each. The appendix presents a progress report, *A Factor Analysis of the Purdue "Scale for Rating Pilot Competency,"* by Robert J.

Wherry and Robert C. Rogers.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1998. Kelly, E. Lowell. *The flight instructor's vocabulary.* (CAA Div. Res. Rep. No. 22, 1943; Publ. Bd. No. 50300.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 58. \$2.00, microfilm; \$4.00, photostat.—This is a report of a preliminary investigation of the words and phrases peculiar to aviation which are used by instructors during the first 10 hours of primary flight training. The study is aimed at an eventual standardization of vocabulary for flight instructors, and incidentally at the development of an improved recording method of studying flight instructional practices. Appendix A presents frequency tables of terms or phrases used by 4 instructors during 42 hours of presolo dual instruction (approximately 10 hours for each instructor). Appendix B presents a transcribed sample of flight instruction. This report describes one of the studies which served as the background for the preparation of two aids to flight instruction known as *Patter* and *Fundamentals of Basic Flight Maneuvers* (see 21: 1999).—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

1999. Kelly, E. Lowell, & Ewart, E. *The effectiveness of "Patter" and of "Fundamentals of Basic Flight Maneuvers" as training aids.* (CAA Div. Res. Rep. No. 6, 1942; Publ. Bd. No. 50286.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 28. \$1.00, microfilm; \$2.00 photostat.—A group of 40 primary Civilian Pilot Training students was divided into two subgroups matched on the basis of 6 variables known or thought to be related to success in learning to fly. One group was called "experimental" and taught with the aid of specially prepared study sheets for students and standardized vocabulary or "patter" for instructors. The other group was called "control" and taught as previous groups of Civilian Pilot Training students had been taught at the same institution. Exhibit "A" presents a sample page from the manual *Fundamentals of Basic Flight Maneuvers*, "B" a sample page from the booklet *Patter*, and "C" a sample page from Ohio State Flight Inventory. A scale for rating pilot competency and a copy of an article, entitled "The Story Behind the Patter," prepared for publication in *Aero Digest*, are included. (See also 21: 1998).—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce.*)

2000. Kelly, E. Lowell, & Ewart, E. *A preliminary study of certain predictors of success in civilian pilot training.* (CAA Div. Res. Rep. No. 7, 1942; Publ. Bd. No. 50287.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 16. \$1.00, microfilm; \$2.00, photostat.—The purpose of this study was to investigate the relative value of 3 measures in predicting the success of primary Civilian Pilot Training students. Two of the measures were obtained before the beginning of the course: (1) a score on a Biographical Inventory (sample items in Exhibit A); and (2) the median rating of a 3-man board after a 20-minute interview involving the use of a Personal

History Inventory (sample items in Exhibit B), and an Aviation Interview Rating Scale (shown in Exhibits C and D). The third measure was the rating by the instructor at the time the student was ready to solo. Data were secured on a group of 40 primary C.P.T. students. Because of the high inter-correlation between Biographical Inventory scores and interview ratings, a combination of them did not improve the prediction. Combining instructor's rating at solo with either the Biographical Interview score or the interview rating greatly increased the accuracy of prediction of final success. C.A.A. inspector's flight test grades were found to be unrelated to any of the other criteria—instructor's solo or completion ratings or check pilot's ratings—and they were not predicted by either the inventory or interview.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

2001. Kuh, C. Selective placement of older workers. *J. Gerontology*, 1946, 1, 313-318.—Experience in employment of older workers in Kaiser shipyards during the war proved very successful, based on development of a technique for analyzing so-called physical characteristics of both jobs and workers. Psychological considerations are implicit in practically all of the 25 mechanical factors describing job operations and 25 environmental factors utilized by a physician to match abilities of workers to requirements of the job. Examples of placement are given. The greatest usefulness of the technique, that of getting a disabled worker back to work sooner than ordinarily possible, speeded shipbuilding, prevented pay loss, and boosted worker morale. Re-engineering of certain machine operations, transference of workers to other jobs, and retraining supplemented the technique described.—R. W. Beebe.

2002. Kunkle, E. Charles. The psychological background of "pilot error" in aircraft accidents. *J. Aviat. Med.*, 1946, 17, 533-567.—A review of the literature indicates that the concept of "accident-proneness" in industry is applicable to flying. The evidence shows that most aircraft accidents are committed by a relatively small percentage of pilots. Present selection techniques do not, however, predict accident-proneness in potential pilots. Two hundred AAF pilots (100 with histories of "pilot error" accidents and 100 control pilots) were examined with intensive, confidential interviews in an effort to uncover significant psychological correlates of flying accidents. It was discovered that (1) a past history of multiple fractures and dislocations and of miscellaneous injuries, (2) the number of scars resulting from past accidents, and (3) ratings of accident-proneness by three independent judges correlate significantly with susceptibility to "pilot error" aircraft accidents. "Falls down stairs, finger-caught-in-door accidents, auto accidents, and breaking of watch crystals are in general of negligible predictive value." The article concludes with a 98-item bibliography on accident-proneness.—A. Chapanis.

2003. Lane, George Gorham. Prediction of success in learning to fly light aircraft. In *Ohio State University, Abstracts of doctoral dissertations . . . 1945-46*. Columbus, 1947, No. 51, 81-88.—Abstract of Ph.D. thesis.

2004. Lincoln, James F. Lincoln's incentive system; covering the basic principles of the incentive system in manufacturing. New York: McGraw-Hill, 1946. Pp. ix + 192. \$2.00.—The writer describes the achievements of the company of which he is President, and relates these to the incentive system in use there. This system is not merely a method of wage payment, it is a philosophy of management and an economic system. Economic theories and techniques and procedures for installing this "incentive management" are included in the discussion. The main emphasis is upon incentives as a framework for management thinking rather than upon detailed procedures.—H. F. Rothe.

2005. National Institute of Industrial Psychology. The Institute's 25th anniversary luncheon. *Occup. Psychol., Lond.*, 1947, 21, 7-16.—Addresses by the Rt. Hon. Lord Piercy, the Rt. Hon. Sir Stafford Cripps, C. S. Myers, and C. B. Frisby briefly review the work of the National Institute of Industrial Psychology.—G. S. Speer.

2006. National Research Council, Committee on Selection and Training of Aircraft Pilots. History and development of the Ohio State Flight Inventory. Part II: Recent versions and current applications. (CAA Div. Res. Rep. No. 51, 1945; Publ. Bd. No. 50322.) Washington, D.C.: U. S. Dep. Commerce, 1947. Pp. 87. \$2.00, microfilm; \$6.00, photostat.—Part II of the report on the Ohio State Flight Inventory continues with the history and development of this technique and form for recording and grading flight performance. It describes the 1942 version with its present applications. As in the previous versions described in part I (see 21: 1990), these later versions were the outgrowth of use of the inventory in research and field situations, and the revisions were based upon experimentally obtained data. This report describes the research findings based upon inventory data obtained during 412 check flights. Appendix I presents *Manual for the Use of the Ohio State Flight Inventory as a Training Aid in the Midwest-Navy Training Project*, prepared by Robert Y. Walker and others.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

2007. Russell, John Dale [Ed.]. (*U. Chicago, Chicago, Ill.*) Problems of faculty personnel. Chicago: University of Chicago Press, 1946. Pp. vi + 146. \$2.00. (*Proc. Inst. adm. Officers higher Instns*, 1946, 18.)—The 13 papers read at the 1946 meetings of the Institute included in this publication are concerned with problems of personnel management as they relate to college faculties. The topics discussed include recruitment, selection, training, morale, professional growth, and evaluation of faculty members.—C. M. Louttit.

2008. Starr, Mark. Role of union organization. In *Whyte, W. F., Industry and society*. New York:

McGraw-Hill, 1946. Pp. 148-167.—The role of union organization in relation to community welfare is summarized. Some of organized labor's achievements are: participation in community efforts for USO, Red Cross and Community Chests; use of professional social workers in personal advice bureaus; establishment of medical care plans; and agitation for wider federal and state provisions for social security.—S. G. Dulsky.

2009. Strang, Jean. *Orthoptics in industry.* *Brit. orthopt. J.*, 1945, 3, 20-27.—The operation of eye clinics in industries in the Birmingham area is reported. The more common complaints which bring the workers to the industrial eye clinic are listed. Long standing squints and heterophoria present most difficulty to the industrial eye clinic in that prolonged treatments are required. Details of cases which have been examined, diagnosed, and treated in the orthoptic department are appended.—F. C. Sumner.

2010. Vernon, P. E. (*U. Glasgow, Scotland.*) *Research on personnel selection in the Royal Navy and the British Army.* *Amer. Psychologist*, 1947, 2, 35-51.—The techniques and results of the psychological research program in the British Army and Navy are discussed. The major part of the presentation concerns research on paper-and-pencil tests. In this part, the various tests studied are listed, the investigation procedures are sketched, and validation is described. 27 references.—N. R. Bartlett.

2011. Viteles, Morris S. *The aircraft pilot; 5 years of research, a summary of outcomes.* (1945; Publ. Bd. No. 50318.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 49. \$1.00, microfilm; \$4.00, photostat.—The Committee on Selection and Training of Aircraft Pilots was established by the National Research Council in September 1939 at the request of the Civil Aeronautics Administration. Research plans were formulated in the fall of that year and research activities initiated early in 1940. This report is devoted to an over-all review of the Committee research program for the 5-year period, 1940-44, inclusive. The Committee was originally organized to undertake research in the selection, training, and maintenance of civilian pilots, but the functions of the Committee were early expanded to include military as well as civilian aviation. Studies on evaluation of pilot performance, emotional disturbances associated with learning to fly, studies of air sickness and aviation accidents were included. This review is written chiefly for the purpose of bringing into focus the useful outcomes of research. Bibliography and appendix listing co-operating research centers and project directors are included.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

2012. Viteles, Morris S., & others. *The association between ratings on specific maneuvers and success or failure in flight training of RAF cadets.* (CAA Airman Developm. Div. Rep. No. 37, 1944; Publ. Bd. No. 50312.) Washington, D. C.: U. S.

Dep. Commerce, 1947. Pp. 37. \$1.00, microfilm; \$3.00, photostat.—This study was undertaken with the view of investigating the relative importance attached to specific maneuvers in failing a cadet in flight training. Presented in this report are the results of 3 methods of analysis of flight records of trainees from 4 RAF training centers. Although all 3 of the methods permit substantially the same interpretation, a discussion of them is included in order to illustrate and compare the various approaches to the problem. The results of this investigation are explanatory only.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

2013. Viteles, Morris S., & Thompson, Albert S. *The use of standard flights and motion photography in the analysis of aircraft pilot performance.* (CAA Div. Res. Rep. No. 15, 1943; Publ. Bd. No. 50294.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 112. \$3.00, microfilm; \$8.00, photostat.—This report describes the basic procedures of the standard flight motion photography and analysis. It presents preliminary findings obtained during standard flights, used as aids in setting up uniform conditions for the measurement of progress in pilot training. Appendix A, "The Evaluation of Flying Habits and Flight Attitude by the Method of Direct Observation," contains reports on 3 independent studies using the procedure for analysis of general flying habits of pilots. A supplemental report includes the *Manual of Standard Check Flight Procedures for Civilian Pilot Training* and illustrative exhibits.—(Courtesy of *Bibl. scient. industr. Rep., U. S. Dep. Commerce*).

2014. Wagner, Tobias. *Selective job placement; a plan for promoting personnel proficiency.* New York: National Conservation Bureau, 1946. Pp. 151. \$2.75.—A study of the work efficiency of physically disabled persons in industry revealed that those improperly placed were poor producers and slow workers. Those properly placed were equal to, or better than, nondisabled persons performing identical work. Some data and case studies are presented to illustrate the above points. Techniques for developing correct placement procedures and the background and philosophy of placing disabled persons are discussed.—H. F. Rothe.

2015. Whyte, William Foote. [Ed.]. *Industry and society.* New York: McGraw-Hill, 1946. Pp. vi + 211. \$2.50.—Based on lectures given by members of the Committee on Human Relations in Industry at the University of Chicago. Composed of 10 chapters, each discussing a different phase of social-industrial relationships. Personnel problems of industry are analyzed in terms of the structure of American society. 27 references. For individual chapter contributions see 21: 1959, 1975, 1984, 1986, 1987, 1988, 1993, 1995, 2008, 2016.—S. G. Dulsky.

2016. Whyte, William Foote. *When workers and customers meet.* In *Whyte, W. F., Industry and society.* New York: McGraw-Hill, 1946. Pp. 123-147.—The restaurant is studied as an example of a service industry—it is really a produce service in-

dustry. The social forces playing upon the waitress are analyzed. Management must reduce the tensions on its employees by realizing that the restaurant is an organization of human relations.—S. G. Dulsky.

[See also abstracts 1824, 1825, 1830, 1835, 1936, 1959, 1975, 2037.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

2017. Brown, Carl Fraser. *Lateral dominance and reading in the elementary school*. In *George Peabody College for Teachers, Abstracts of dissertations* . . . 1946. Nashville, 1946. Pp. 1-10.—Abstract of Ph.D. thesis.

2018. Combs, Arthur W. (Syracuse U., Syracuse, N. Y.) *Non-directive techniques and vocational counseling*. *Occupations*, 1947, 25, 261-267.—Non-directive techniques have particular applicability to vocational counseling: (1) as a preliminary interview technique; (2) when there is marked variation between level of aspiration and demonstrated ability, or between expressed and measured interests; (3) when precounseling information indicates a pressing social, emotional, or personal problem; (4) when it is necessary for the client to make decisions; and (5) whenever it is necessary to deal with parents.—G. S. Speer.

2019. Curtz, Ernst F. *How to get the job you fit*. New York: F. Watts, 1946. Pp. 64. \$1.00.—A popular manual of brief tests for self-appraisal, with discussion of job opportunities and the relations of traits sampled to job requirements.—C. M. Louttit.

2020. Drew, L. J. *An investigation into the measurement of technical ability*. *Occup. Psychol., Lond.*, 1947, 21, 34-48.—Test data obtained from 559 boys 11 years of age were subjected to factor analysis in an attempt to determine whether the special ability that makes for success in technical education can be measured adequately for selection and placement. It is concluded that the psychological factors significant for technical aptitude are g, F, and K. Factors g and F can be measured at 11, but factor K does not appear to be measured earlier than 13. Selection of boys for technical education can be made at 11 by measuring technical aptitude in addition to tests of general and verbal ability.—G. S. Speer.

2021. Geldreich, Edward W. *Possible use of Entry Occupational Classification, Dictionary of Occupational Titles, Part IV, by high school counselors*. *Trans. Kans. Acad. Sci.*, 1946, 49, 210-216.—The *Entry Occupational Classification*, Volume IV of the *Dictionary of Occupational Titles*, is described. It provides a "clearly structured concept of the types of jobs which beginners can enter" and aids the counselor in pointing out the occupational significance of school courses, casual work experience, interests, and the like. It suggests methods of estimating the personal traits of value for specific

occupational fields. It has obvious value in the counseling of high-school drop-outs and in scheduling work experiences for vocational exploration.—W. A. Varvel.

2022. Hagenhoff, M. Pelagia. *The educational philosophy of Friedrich Wilhelm Foerster*. Washington, D. C.: Diss., Catholic University of America, 1946. Pp. xiii + 256.—Foerster is said to emphasize character education and the necessity for religious training for the young, the teacher being guided by an aim based on "supernatural philosophy" which is theocentric rather than anthropocentric, including acceptance of the doctrine of original sin. The soul of man is conceived of as an immortal spirit endowed with intelligence and free will which should seek conformation with the will of God. 24-page bibliography.—G. E. Bird.

2023. Huggett, Albert J., & Millard, Cecil V. (Michigan State Coll., East Lansing, Mich.) *Growth & learning in the elementary school; psychological foundations of instruction and practice in the elementary school*. Boston: Heath, 1946. Pp. xiii + 414. \$3.00.—"Educational psychology is considered here as a tool by which teachers may discover the most efficient way to realize the accomplishment of educational goals." There are 3 subdivisions. In Part I the structure and organization for elementary school practices are discussed. Programs that are functional, unified, and adjusted to life ends are indicated as essential to the achievement of the goal of education, the development of the whole child. Part II describes the teaching of the skill subjects, the sciences and the arts and crafts with special emphasis on the integration of subject matter. The point of view assumed is that the physical, emotional, intellectual, and social aspects of living are so closely allied that education must strive to foster this unity. The final section, Part III, concludes with an analysis of various aids for appraising the pupil's growth. The values of the Journal Record, the Daily Program Logs, the Educational Profile, the Growth Analysis, the Personality Inventory, and the Health Record for the effective guidance of the child are demonstrated.—V. M. Staudt.

2024. Jacobsen, Carlyle F. (Washington U. Sch. Med., St. Louis 10, Mo.) *Interest and attitude as factors in achievement in medical school*. *Wash. Univ. med. Alumni Quart.*, 1946, 9, 163-169.—Scores of members of 4 classes of the Washington University School of Medicine on the following tests: Medical Aptitude, CAVD, Wonderlic Intelligence, Haggerty's Reading Skill, Strong's Vocational Interest, and Minnesota Personality Schedule, are compared with their actual achievement in medical school. The results indicate that a higher percentage of those scoring high on each or in all the tests did successful work in medical school and vice versa. The overlapping of low test performance with satisfactory achievement in medical school and of high test scores with low-failing achievement leads the author to doubt the prediction value of these tests

for the individual case. It is, however, possible "to identify a group of students with a cluster of abilities, interests, and personal sentiments that augur poorly for success in medical school, and to say with reasonable probability (the chances are 1 against 7) that they will not succeed as medical students."—*F. C. Sumner.*

2025. McIntyre, Sherwood Cecil. *The veteran—a counselee.* In *Ohio State University, Abstracts of doctoral dissertations . . . 1945-46.* Columbus, 1947, No. 51, 97-103.—Abstract of Ph.D. thesis.

2026. Mathewson, Robert H. (*Harvard U., Cambridge, Mass.*) *Educational problems of veterans—and other civilians.* *J. Amer. Ass. coll. Registr.*, 1946, 21, 462-474.—From a sampling of opinion of deans, veterans' counselors, and other university officials, it is concluded that the veteran is a serious, better-than-average student, who is "vocational-minded." What educational problems he has stem not from the veteran but from other sources. These sources of difficulty are indicated as the selection process, purpose of education, the distribution of students in various curricula, the need for guidance and counseling, and the kinds of curricula offered by colleges. It is indicated that these problems, which are discussed at length, affect nonveterans as well as veterans.—*G. S. Speer.*

2027. Myklebust, Helmer R. *Remedial reading for children with impaired hearing.* *Train. Sch. Bull.*, 1947, 43, 170-177.—This problem is discussed under the following headings: educational implications, psychological implications, symptoms and identification, hearing and vision, hearing aids, and audiogram interpretations. "Rarely is it possible to consider only the degree of hearing loss when suggesting a remedial and corrective program for the child. The significance of such factors as age of onset, etiology, intellectual level and attitude toward hearing loss must be understood."—*S. B. Sarason.*

2028. Recktenwald, Lester Nicholas. (*Marquette U. V. A. Center, Milwaukee, Wis.*) *Homogeneity of items in Cleeton's classification.* *Occupations*, 1947, 25, 275-277.—The responses of 83 twelfth-grade boys were studied in an attempt to determine which of the three groupings appearing in the Cleeton Vocational Interest Inventory for each category of vocational interests contains items most closely associated with each other. It is concluded that "the miscellany listed as belonging to the occupations in any one category are not so distinctive to that category as they ought to be in a rigorously constructed instrument."—*G. S. Speer.*

2029. Remmers, H. H. (*Purdue U., Lafayette, Ind.*), Davenport, K. S., & Potter, A. A. *The best and the worst teachers of engineering.* *Purdue Univ. Stud. higher Educ.*, 1946, 57. Pp. 20.—A sample of 559 members of 5 major engineering societies rated their best and worst teachers on the Purdue Rating Scale for Instructors. No differences were found between the ratings of the different

engineering groups. Between the best and worst teachers there were large and significant differences on all 10 traits. The ratings of professionals and undergraduates showed high correlations.—*C. M. Louttit.*

2030. Russell, David H. *Reading disabilities and mental health: a review of research.* *Understanding the Child*, 1947, 16, 24-32.—Approaches to reading problems are discussed and representative studies are noted, 34-item bibliography.—*S. B. Sarason.*

2031. Stroh, Mary Margaret. (*Wilson Teachers Coll., Washington, D. C.*), Jewett, Ida A., & Butler, Vera M. *Better selection of better teachers.* Washington, D. C.: Delta Kappa Gamma Society, 1943. Pp. xvi + 110. \$1.00.—Part I presents an analysis of responses of 5,749 women teachers to a questionnaire dealing with factors involved (1) in choosing teaching as a career, (2) in being chosen for first and also present position, (3) in being admitted to professional preparation, and (4) in the re-evaluation of teachers. Part II is an analysis of replies by 252 teacher-educating institutions to a questionnaire dealing with student selection procedures. Part III is a summary of studies on teacher selection. This part contains an 86-item bibliography. Part IV presents recommendations for improving the recruitment, selection, training, and supervision of teachers.—*N. L. Gage.*

2032. Tompkins, Miriam D. (*Columbia U., New York.*) *Syllabus for the study of reading interests and habits of adults . . . (4th ed.)* New York: School of Library Service, Columbia University, 1947. Pp. v + 47. \$1.50.—This manual includes study outlines for 14 topics concerned with the reading interests, habits, and abilities of adults. It is designed for use in the training of library personnel. The 12-page bibliography brings up to date the literature on "effects of reading on society and on the individual." Also covered are studies of motion pictures and radio to the extent that they contribute to the sociology and the psychology of communication.—*C. M. Louttit.*

2033. U. S. Department of Labor. *Aids in counseling.* Washington, D. C.: U. S. Department of Labor, 1946. Pp. i + 6. Gratis.—This bibliography lists publications of the Department of Labor which were "selected by an interdepartmental committee for their usefulness in counseling." Publications are grouped under the following heads: (1) information to which ready reference may be made during counseling interview; (2) background information: trends, legislation, detailed job descriptions in industry, wages; (3) counseling and related techniques, counseling services, counselor training; (4) periodicals; and (5) other types of miscellaneous publications that may be useful.—*C. P. Froehlich.*

[See also abstracts 1710, 1737, 1848, 1896, 1912, 1934, 1985, 1998, 1999, 2000, 2007.]

MENTAL TESTS

2034. Da Costa, Rui Carrington. Quociente de inteligência de Stern ou constante pessoal de Heinis? (Stern's intelligence quotient or Heinis' personal constant?) *Criança portug.*, 1945-46, 5, 19-66.—The history of the IQ and a summary of the IQ constancy problem is considered together with the theoretical and mathematical foundations of the IQ and the PC. An experiment with 407 subjects using a Portuguese revision of the Otis Self-Administering Test for two testings over periods of one to four years showed that the PC was more constant than the IQ. PC tables are given. French summary.—R. J. Corsini.

2035. Franzen, Raymond. A method for selecting combinations of tests and determining their best cut-off points to yield a dichotomy most like a categorical criterion. (CAA Div. Res. Rep. No. 12, 1943; Publ. Bd. No. 50291.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 25. \$1.00, microfilm; \$2.00, photostat.—This report presents a new method for the analysis of results obtained in investigations on the selection of aviation personnel. In addition to the main report, there is presented in appendix A a simplified revision of the method, developed by Paul F. Lazarsfeld in collaboration with R. Franzen, which provides a short-cut computational procedure for the solution of problems involving the selection of the best combination of dichotomous arrangements to distinguish a categorical criterion. In appendix B comparisons of multiple chi and multiple regression techniques are presented.—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce.)

2036. Heim, A. W. An attempt to test high-grade intelligence. *Brit. J. Psychol.*, 1947, 37, 70-81.—A new intelligence test, A.H. 5, partly verbal and partly nonverbal, was designed to test people of high-grade intelligence; the items were more difficult than those of a previous test, A.H. 4. A.H. 5 was less affected by speed than was A.H. 4. There was a lower correlation between performance on the verbal and nonverbal parts of the test, indicating increased bias in one or other of these directions for people of higher intelligence. Although fully adequate data were not obtained, there was a tendency for university students taking mathematics and engineering to score better than those taking English and modern languages.—M. D. Vernon.

2037. Kogan, L. S., & others. Analysis of the Personal History Inventory. (CAA Div. Res. Rep. No. 42, 1945; Publ. Bd. No. 50314.) Washington, D. C.: U. S. Dep. Commerce, 1947. Pp. 34. \$1.00, microfilm; \$3.00, photostat.—An analysis of the P-H (Personal History) Inventory, initially designed as an interviewing aid, was made to investigate its possible use as a separate pencil-and-paper inventory. It was administered to 1,427 subjects as part of the Standard Testing Program. The group was divided into Samples A and B (without previous flight experience) and Samples C (with previous

flight experience). The purpose was: (1) to investigate the stability of the items; (2) to develop a scoring key for the P-H which would predict success in primary flight training; and (3) to study the relationship between the P-H and other tests of the standard battery. The P-H Inventory is essentially a device for obtaining biographical data together with self-estimates of proficiency in selected activities. The inventory consists of 100 questions which the subject answers with "Yes" or "No."—(Courtesy of *Bibl. scient. industr. Rep.*, U. S. Dep. Commerce.)

[See also abstracts 1822, 1928, 1997.]

CHILDHOOD AND ADOLESCENCE

2038. Chastaing, Maxime. Notes sur les illusions du pédologue. (Observations on the illusions of the child psychologist.) *J. Psych. norm. path.*, 1946, 39, 220-229.—In this attack upon the question approach used by Piaget and Wallon in their studies of the child's mind, the author charges that the psychologist in trying to enter the world of the child necessarily imposes upon it his own adult problems and point of view. Children are not interested in "thought" or in the "soul." They become "solipsistic" only in the face of questions which force them out of their habitual childish roles. The "story-telling" of children gives ample evidence of their awareness of a world outside themselves and of their readiness to play up to an audience, which should be sufficient refutation of the claim that they are egocentric. But it has apparently not occurred to those who base their conclusions about child mentality on the answers children give to a psychologist's questions that the children may be merely engaging in "serious play" with the psychologist. With no intent to deceive they are merely playing the philosophical role the psychologist has written for them. The result is "neither the world of the adult nor the world of the child, but the world-of-the-adult-for-the-child."—M. R. Sheehan.

2039. Dodson, Dan W. (New York U.) The community and child development. *J. educ. Sociol.*, 1947, 20, 264-271.—As the development of the whole child becomes emphasized in education, the community—the local social world of the child—plays a greater role in education. One problem in teacher training is how to help youth transcend such local environments as instill improper goals. A second is how to remove such community-rooted blockings as frustrate young people and bar their achievement of goals. Many thwartings arise in local communities. In Harlem tension comes from adjustment to urban conditions, also from housing, health, delinquency, and educational conditions. In other neighborhoods, too, are obstacles, as race and religious conflict. Education programs must be developed out of community needs.—H. A. Gibbard.

2040. Fontes, Vítor. Notas à margem de dois diários-intimos de adolescentes. (Notes on two intimate diaries of adolescents.) *Criança portug.*,

1945-46, 5, 67-91.—The adolescent period is important for the adult psychic development. This is a period of intense self-analysis. The diaries of two girls, 14 and 15 years of age, show the need for introspection, philosophical interpretation of life, fantastic imagination, over-romanticism, black pessimism, and a tendency towards doubt, indifference, nostalgia, and disenchantment. The excesses of mood in this period need not be taken too seriously, they are normal for this period of life, and rarely correspond to the reality of the individual. French summary.—R. J. Corsini.

2041. Giordano, Luis. *Escolares que trabajan, hijos unicos y huérfanos.* (Pupils who work, only children and orphans.) *Bol. Inst. int. amer. Prot. Infanc., Montevideo*, 1946, 20, 305-312.—The author reports a survey made by the Argentine Council for Family Education on 71,830 school children in Argentina. 1.45% of children in the first half of the first grade, 6.24% in the second half of the first grade . . . up to 23.87% of children in the sixth grade were working beyond school hours. 15% of these children had no brothers or sisters. Of the half-orphans, 2.82% had no mothers; 7.35% had no fathers; .6% had neither father nor mother. Only children are more neurotic and present greater behavior problems than children with siblings. The fatigued child who must work is a social problem as well as the abandoned orphan. Suggestions are made for: (1) a study of families where children work, (2) intensive psychological studies of problem children, (3) child-study programs for inapt pupils, (4) establishment of schools for parents, and (5) attempts to adjust the home to the school.—R. J. Corsini.

2042. Keliher, Alice V. (*New York U.*) *Community neglect of children.* *J. educ. Sociol.*, 1947, 20, 259-263.—Data are given which show some of the unmet needs—parental, recreational, physical, mental and emotional, economic, housing—of children in New York City. Some child needs which communities should be organized to meet are cited. In parallel columns are listed the ways in which a child's emotional and growth needs may be met by his family and by his community.—H. A. Gibbard.

2043. Lane, Howard A. (*New York U.*) *An education-centered community can care for children.* *J. educ. Sociol.*, 1947, 20, 272-280.—The measure of the quality of a society is the care it gives its children. There is widespread neglect of little children in our society. Three manifestations of "malnutrition of the spirit" are dullness, neurosis, and aggression. In large part the frustrations of our time result from a lag in social thinking and facilities behind the technological and economic. We need: to be valuable to other people, to think well of ourselves, and to live creatively. Children need: to value authority, to be valuable to each other, to think well of themselves, freedom, independence, creative living, nature, and fun. Schools must be oriented toward children's and community needs.

This requires a reorientation of teacher training and school leadership.—H. A. Gibbard.

2044. Lassers, Leon. (*State Dep. Education, Portland, Ore.*) *How parents and teachers can help prevent stuttering (or stammering) in children.* Portland, Ore.: State Department of Education, 1945. Pp. 48.—A guide for parents in acceptable methods of dealing with children who stutter or whose speech suggests the possible development of stuttering.—C. M. Louttit.

2045. Moloney, James Clark. (*The Haven Sanatorium, Rochester, Mich.*) *The Cornelian Corner.* *Psychiat. Quart.*, 1946, 20, 603-609.—The mental hygiene values inherent in the pediatric-psychiatric practices (no separation of newborn infant from parents; breast feeding; flexible schedules of infant feeding; lightening of cultural pressures toward early toilet training) encouraged by the "Cornelian Corner" group of professional workers are discussed.—A. L. Benton.

2046. Peraza, Gilda. (*U. Havana, Sch. Med., Havana, Cuba.*) *Mental and physical benefits of a well-balanced diet on a group of undernourished children.* *J. Amer. med. Wom. Ass.*, 1946, 1, 256-257.—Forty poorly fed children received daily, except Sunday, a breakfast consisting of: 8 oz. of pure pasteurized milk, grade A; an orange; 2 tablets of dry yeast; and 5 drops of fish liver oil. After 8 weeks, 77.5% of the children showed an increase of weight between 1 and 4 lbs.; 52.5% increased in height between $\frac{1}{4}$ and $\frac{1}{2}$ inch; 100% of the children initially having conjunctivitis were cured of it; 50% of the children initially having disturbances of the tonsils were cured or improved; and 60% of those having initially presented polyadenitis were improved or cured. There was also noted an improvement in the disposition for work.—F. C. Sumner.

2047. Pfleger, Janet. "The wicked stepmother" in a child guidance clinic. *Smith Coll. Stud. soc. Work*, 1947, 17, 159-184.—The wicked stepmother theme as it appears in literature is briefly reviewed, followed by an analysis of psychological factors in the stepmother relationship. Case records on 27 stepmothers and their stepchildren who had come to a child guidance clinic are analyzed for the stepmothers' attitudes toward the stepchildren, and the attitude of the children toward the stepmothers. A wide variety of attitudes was found.—M. R. Jones.

2048. Sparling, Margaret E. (*Mental Health Clinic, Ontario Hospital, London, Ont.*) *A rejected child: problems, treatment and outcome.* *Psychiat. Quart. Suppl.*, 1946, 20, 98-107.—"This study has presented an example of insecurity with its resultant behavior and personality difficulties. This feeling of insecurity had as its foundation, resentment of a father and stepmother toward a child of five years, followed by rejection overtly expressed in their desire to place this child for adoption. Despite a somewhat unstable hereditary background, she ad-

justed well in new environments, and now is a happy, satisfied, responsive girl of 12 years of age."—*W. E. Artus.*

2049. [Thom, Douglas Armour.] *Guiding the adolescent.* (Rev. ed.) *U. S. Child. Bur. Publ.*, 1946, No. 225. Pp. 83.—This revised edition was written to "bring the pamphlet into line with our increased knowledge of teen-age children, although the principles underlying the guidance of adolescent children have remained the same since the bulletin was written in 1933." The main topics covered in addition to the introduction, which gives the purpose of the pamphlet and defines adolescence and the adult attitude toward it, are: physical growth and development; attitudes toward sex; adolescence and mental development; the individual as a whole; some educational pitfalls; the question of work; learning to use leisure; asocial conduct; evading reality; the adolescent and his companions; and the needs of the parent. (See also 8: 6172.)—*C. P. Froehlich.*

2050. Trainham, Genevieve. (Merrill-Palmer School, Detroit, Mich.), & Montgomery, John C. *Self-demand feeding for babies.* *Amer. J. Nurs.*, 1946, 46, 767-770.—Two procedures in the feeding of babies are here advocated as making for the mental and physical health of both mother and infant: (1) self-demand feeding, i.e., feeding the infant only when he demands to be fed and not according to some rigid schedule and (2) breast feeding by the mother. The first insures an association of food with satisfaction and promotes a feeling of security and a happy world-view in the child. Self-demand feeding gradually assumes of itself a rhythm and spacing peculiarly satisfactory to the child. Breast feeding by the mother, besides taking advantage of the superiority of breast milk, meets emotional needs of the infant for sucking and cuddling as well as those of the mother to feel herself useful and important to someone.—*F. C. Sumner.*

[See also abstracts 1775, 1846, 1870, 1896, 1914, 1915, 1917, 1918, 1932.]

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In response to many requests there are listed below all of the journals which are received in the Editorial Office through exchange or by gift as of April 1947. These journals are accessioned and searched in the Office before being sent to co-operating abstractors. In addition to the journals in this list there are a number which are searched regularly from personal or library copies by abstractors who have agreed to assume such responsibility. At a later date a list of all journals regularly searched will be published. Suggestions for journals which readers believe should be added to the exchange list will be welcome. The place of publication is given in parentheses in this list; for more complete information the reader is referred to *Ulrich's Periodicals Directory* abstracted in 21: 998.

1. Acta Oto-Laryngologica (Stockholm)
2. Acta Oto-Laryngologica, Supplement (Stockholm)
3. Acta Paediatrica (Stockholm)
4. Acta Paediatrica, Supplement (Stockholm)
5. Acta Psychiatrica et Neurologica (Copenhagen)
6. Advanced Management (New York)
7. Afroamerica (Mexico, D. F.)
8. Alcohol Hygiene (Baltimore, Md.)
9. American Annals of the Deaf (Washington, D. C.)
10. American Imago (Boston)
11. American Journal of Mental Deficiency (Albany, N. Y.)
12. American Journal of Ophthalmology (Cincinnati, Ohio)
13. American Journal of Optometry (Minneapolis, Minn.)
14. American Journal of Orthopsychiatry (New York)
15. American Journal of Psychiatry (Baltimore, Md.)
16. American Journal of Psychology (Ithaca, N. Y.)
17. American Journal of Psychotherapy (New York)
18. American Journal of Sociology (Chicago)
19. American Psychologist (Washington, D. C.)
20. American Review of Soviet Medicine (New York)
21. American Scientist (New Haven, Conn.)
22. American Sociological Review (Washington, D. C.)
23. Annals of Eugenics (London)
24. Annals of the New York Academy of Sciences (New York)
25. Année Psychologique (Paris)
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30. Archives of Ophthalmology (Chicago)
31. Archives de Psychologie (Geneva, Switzerland)
32. Archivio di Psicologia, Neurologia e Psichiatria (Milan)
33. Archivos de Medicina Legal (Buenos Aires)
34. Archivos Venezolanos de la Sociedad de Otorino-laringología, Oftalmología, Neurología (Caracas)
35. Australasian Journal of Psychology and Philosophy (Sydney)
36. Beihefte zur Schweizerischen Zeitschrift für Psychologie und ihre Anwendungen (Bern)
37. Bibliography of Scientific and Industrial Reports (Washington, D. C.)
38. Biological Abstracts (Philadelphia)
39. Boletim do Serviço Social dos Menores (São Paulo)
40. Boletín Bibliográfico Mexicano (Mexico, D. F.)
41. Boletín del Instituto Internacional Americano de Protección a la Infancia (Montevideo)
42. Boletín del Instituto Psicopedagógico Nacional (Lima)
43. British Journal of Educational Psychology (Birmingham)
44. British Journal of Medical Psychology (London)
45. British Journal of Ophthalmology (London)
46. British Journal of Ophthalmology, Monograph Supplement (London)
47. British Journal of Psychology (London)
48. Bulletin of Industrial Psychology and Personnel Practice (Melbourne)
49. Bulletin. Industrial Relations Center, University of Minnesota (Minneapolis, Minn.)
50. Bulletin of the Los Angeles Neurological Society (Los Angeles, Calif.)
51. Bulletin of the Menninger Clinic (Topeka, Kan.)
52. Canadian Journal of Psychology (Toronto)
53. Child Development (Washington, D. C.)
54. Child Development Abstracts and Bibliography (Washington, D. C.)
55. Child Development Monographs (New York)
56. Chinese Journal of Educational Psychology (Chungking)
57. Ciba Symposia (Summit, N. J.)
58. Ciencia (Mexico, D. F.)
59. College and Research Libraries (Chicago)
60. Comparative Psychology Monographs (Baltimore, Md.)
61. Compass (New York)
62. Criminalia (Mexico, D. F.)
63. Crippled Child (Chicago)
64. Cumulative Book Index (New York)
65. Current List of Medical Literature (Washington, D. C.)
66. Digest of Neurology and Psychiatry (Hartford, Conn.)
67. Diseases of the Nervous System (Chicago)
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69. Educational Records Bulletin (New York)
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71. Erasmus—Speculum Scientiarum (Amsterdam)
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74. Eugenics Review (London)
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76. Geriatrics (Minneapolis, Minn.)
77. Hospital (Rio de Janeiro)
78. Human Relations (Cambridge, Mass.)
79. Index de Neurología y Psiquiatría (Buenos Aires)
80. Indian Journal of Psychology (Calcutta)
81. Individual Psychology Bulletin (Chicago)
82. Industrial Training Abstracts (Detroit, Mich.)
83. Infantry Journal (Washington, D. C.)
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85. Jewish Social Service Quarterly (New York)
86. Journal of Abnormal and Social Psychology (Washington, D. C.)

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141. Proceedings of the Conference(s), Child Research Clinic Woods Schools (Langhorne, Pa.)
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161. Quarterly Journal of Studies on Alcohol (New Haven, Conn.)
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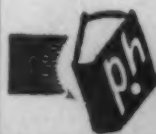
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